CROSS-CULTURAL EXPERIENCE, PERFORMANCE FEEDBACK , MODEL COMPETENCE, AND CULTURAL SELF-EFFICACY: ANALYSIS OF A MODEL

A DISSERTATION

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

IN THE GRADUATE SCHOOL OF THE

TEXAS WOMAN'S UNIVERSITY

COLLEGE OF NURSING

BY

LOUISE TALLEY, BSN, MS

DENTON, TEXAS

MAY 2002

TEXAS WOMAN'S UNIVERSITY

DENTON, TEXAS

March 28, 2002

To the Dean of Graduate Studies and Research:

I am submitting herewith a dissertation written by Louise Talley entitled "Cross-Cultural Experience, Performance Feedback, Model Competence, and Cultural Self-Efficacy: Analysis of a Model." I have examined this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Nursing.

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ACKNOWLEDGMENTS

I would like to thank my husband, Al, for his support, both emotional and technical, and for keeping a "lighted candle" throughout my doctoral studies and dissertation. I would also like to thank my daughter, Jennifer, for her assistance with data entry during the pilot study, but most especially for her prayers. I would like to acknowledge the sacrifices and patience of my son, Ryan, whose mother has been in graduate school for half of his life. I am grateful to the nursing faculty of Langston University for their years of encouragement and assistance. To Terry Northcutt, Patti Catts, Helen Hansen, and Sandy Cesario, I would like to say, "It was a great ride, and I am better for having shared the journey with you."

I would like to thank Dr. Lynn Wieck, Dr. Margaret Beard and Dr. Melinda Holt for agreeing to be on my dissertation committee and for their valuable assistance with the study design, the pilot study, and data analysis. Finally, I am grateful to Dr. Sally Northam for her encouragement and direction in the planning and implementation of the study, and for her guidance in the preparation of this document.

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ABSTRACT

LOUISE TALLEY, BSN, MS

TEXAS WOMAN'S UNIVERSITY
COLLEGE OF NURSING
MAY, 2002

The purpose of this cross-sectional, nonexperimental, survey design study was to test theorized sources of self-efficacy by examining factors which might explain the variance in a proposed model of perceived cultural self-efficacy in nursing students. The convenience sample consisted of 351 nursing students enrolled in eight associate degree and baccalaureate degree programs in the Midwest. Stepwise multiple regression was used to measure relationships among cross-cultural experience, performance feedback in cultural diversity education, model competence, and perceived cultural self-efficacy. Cultural Self-efficacy was measured with the Bernal and Froman Cultural Self-efficacy Scale (CSES). Cross-cultural experience was operationalized as the sum of responses to seven questions which included the number of years the respondent lived outside the United States, the number of foreign languages spoken, the percentage of interactions with persons from a different cultural heritage and the percentage of patients from a different cultural heritage for whom care was provided. Performance feedback of cultural

diversity education was measured with the Performance Feedback Scale (PFS). Evaluation and review from a panel of five nursing faculty with extensive transcultural experiences supported the construct and content validity of the PFS. Model competence was measured by the Model Evaluation Scale (MES).

Data analysis revealed that cross-cultural experience, performance feedback in cultural diversity, and model competence significantly explained 13.2% ($p = .000$) of the variance in perceived cultural self-efficacy. Results showed a statistically significant relationship with cross-cultural experience, performance feedback in cultural diversity education, model competence, and perceived cultural self-efficacy.

Findings suggest that three factors positively influence a nursing student's cultural self-efficacy: Cross-cultural experiences, cultural diversity education in their nursing programs that includes positive performance feedback from nursing faculty, and role modeling by culturally competent nurses.

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CHAPTER 1

INTRODUCTION

America has the best health care system in the world, but not every American has the best health care in the world.

President Bill Clinton, 1998

Disparities in health and expectations for growth of minorities in the United States have placed demands on the health care system to provide health care that is culturally acceptable to racial and ethnic groups, as well as effective and economical. It is logically assumed that enhancing health care professionals' cultural knowledge and skills holds potential for influencing culturally competent care outcomes such as improved client morbidity and mortality, and client and professional levels of satisfaction (Jones, Bond & Cason, 1998; Smith, 1998a). The Office of Minority Health (1998) emphasizes lack of culturally appropriate care as an ongoing problem and calls for health care providers to have an understanding of cultural issues and get beyond the "one-size" fits all mentality of program development and implementation. Campinha-Bacote, Yahle, and Langenkamp (1996) cited the even greater challenge of identifying ways to influence health care staff who do not see a need for making this change. Evidence continues to confirm biases

among health care staff against the diverse cultures and religions that make up this nation (Mason, 2002).

In order to achieve more culturally competent care, health care providers need to increase their knowledge of the beliefs, values, and health care practices of people from different sociocultural groups and to recognize the differences in perspectives between themselves and their clients. Health professionals and individuals from minority cultures may have different priorities in regard to health care which can affect patients' responses to health services and minimize effectiveness of their treatment (Anderson, 1990; Fong, 1985). Minority consumers may also look upon healthcare providers with fear and distrust due to previous experiences with caregivers who ignored, violated, or ridiculed their cultural beliefs and practices (McGee, 2001; Smith, 1998c). The majority of healthcare providers are White and may be perceived as being unable to competently relate to diverse groups. These perceptions by minority cultures may lead to poor access to health care and poor health outcomes (Smith, 1998c).

The nursing profession commonly recognizes the cultural dimension as a central aspect of each individual (Giger & Davidhizar, 1995; Leininger, 1991; Leuning, Swiggum, Wiegert, & McCullough-Zander, 2002; Potter & Perry, 1993), yet the concept of cultural competence is a new behavior expectation in nursing that has not been well defined or developed (St. Clair & McKenry, 1999). Not only must nurses be able to provide "hands on" care to individuals from diverse backgrounds, but they must be able to direct the services provided by other nurses, unlicensed assistive personnel, and other health care

workers (Lockhart & Resick, 1997). Furthermore, nurses have been identified as being central to the development and maintenance of programs that deliver culturally competent health care (American Academy of Nursing Expert Panel on Culturally Competent Nursing Care, 1992). Related studies indicate that nurses describe themselves as not confident in working with culturally diverse clients (Bernal & Froman, 1987; 1993).

While cultural competence is a primary concern in nursing practice, the lack of confidence in providing culturally competent health care is a nursing education problem. What we see is that nursing education varies a great deal in terms of content and clinical experiences (Abrums & Leppa, 2001; Brink, 1994; Fernandez-Santiago, 1994; LeVar, 1998; Lynam, 1992; Tunley-Crenshaw, 1994; and Williamson, Stecchi, Allen, & Coppens, 1996). The manner in which cultural diversity education is handled within any given curriculum depends on the values and beliefs in the department philosophy and conceptual or organizing framework (Capers, 1992). Even if philosophies reflect a commitment to safe, effective care for clients from diverse and multicultural populations, cultural diversity education in many nursing programs is often ignored in the course objectives or taught by faculty unprepared to teach the content (Brink, 1994).

The most traditional approach to teaching cultural care in nursing education is through didactic content and clinical experiences incorporating multicultural clients. Yet, it is most likely a multiplicity of factors that influence students' perceptions about their performance. International immersion experiences have been found to be effective in overcoming students' ethnocentrism, increasing students' cultural awareness and

sensitivity, and developing students' abilities to integrate the patients' cultural practices into Western health care practices (St. Clair & McKenry, 1999). International immersion experience may not be a practical alternative for many nursing education programs and their students. The major question is how best to educate nurses so they will be effective in responding to and providing culturally congruent care (Leininger, 1995). How can we teach it if we're not certain what contributes to cultural competence?

Behavioral measures of culturally competent care are still lacking in nursing. Recent studies have tapped perceived cultural self-efficacy as a measure of cultural competence (Alpers & Zoucha, 1996; Bernal & Froman, 1987, 1993; St. Clair & McKenry, 1999). Bandura (1997) asserts that a major basis for human action is efficacy belief. Self-efficacy involves people's beliefs or confidence in their capabilities to produce desired effects by their action. This study offers a model for perceived cultural self-efficacy in nursing students that is based on Bandura's construct of self-efficacy. Proposed sources of cultural self-efficacy will be examined for their contribution to perceived cultural self-efficacy in students. These proposed sources include cross-cultural experience, performance feedback, and model competence.

Problem of Study

The problem addressed in this study was: Do relationships among the variables of cross-cultural experience, performance feedback, model competence, and perceived cultural self-efficacy correspond to a model of factors identified as principal sources of efficacy beliefs in nursing students?

Purpose of the Study

The purpose of this study was to test the theorized sources of self-efficacy (Bandura, 1997) by examining factors which might explain the variance in perceived cultural self-efficacy in nursing students. This explanation of variance was expected to enhance the understanding of what influences cultural self-efficacy in nursing students and thus, leads to more culturally competent care for racial and ethnic minorities.

The study also tested the study-specific reliability of the Cultural Self-efficacy Scale (CSES), the Performance Feedback Scale (PFS), the Model Evaluation Scale (MES) and the Visual Analogue Cultural Self-efficacy Scale (VACSES). Cronbach's coefficient alpha was used to assess reliability of the measures. The VACSES was used to assess concurrent validity of the CSES. Multiple regression was used to measure relationships among the variables of the model.

Rationale of the Study

Both discovery and confirmation of theory are necessary to effective scientific work (Marx, 1963). Bandura's theory of self-efficacy (1997) will be tested indirectly through the empirical testing of a derived model of perceived cultural self-efficacy in nursing students. Nurses in practice do not report even moderate levels of cultural confidence in caring for clients from cultures other than their own (Bernal & Froman, 1987; 1993). This suggests that nurses may not be provided adequate cross-cultural nursing experiences, performance feedback, and exposure to culturally competent models during their nursing education in order to build confidence in providing culturally

competent care to diverse populations. Findings in this study may support the credibility of Bandura's theory and validate the existence and relevance of sources of nurses' cultural self-efficacy.

Theoretical Framework

The theoretical framework for this proposed study of cultural self-efficacy in nursing students is based on Bandura's proposed sources of efficacy beliefs (1997). A major basis for human action is efficacy belief. "Perceived self-efficacy refers to beliefs in one's capabilities to organize and execute the courses of action required to produce given attainment" (Bandura, 1997, p. 3). Unless people believe that they can achieve a desired effect by their actions, they have little incentive to act. These personal beliefs influence, among other things, the courses of action people choose to pursue, how much effort they invest, and how long they will persevere in the face of obstacles. If people believe that they do not have the ability to produce results, they will not attempt to make things happen (Bandura, 1977; 1997).

People make judgements about their own efficacy because these judgements serve functional purposes. Acting on accurate self-appraisals of one's ability increases the possibility for success. Acting on misjudgements of personal capabilities can be costly to one's psyche, one's personal finances, one's health, and one's life. Misjudgements about capabilities can also impact the lives of others (Bandura, 1997) .

Faulty assessment of self-efficacy or performance is the most common form of disparity between efficacy judgement and action. In faulty assessment, beliefs of personal

efficacy exceed performance. These optimistic judgements of self-efficacy do not necessarily mean that individuals have inflated ideas about their capabilities, as is commonly assumed. Rather, exaggeration of abilities may come from inadequate knowledge of task demands or of how the social system works (Bandura, 1997). Many prospective nursing students enroll in a nursing program uninformed about the academic rigors they will face. Based on the media's representation of the profession of nursing and the lack of informed guidance by high school counselors, they may be ill-prepared for the academic performance required to be successful in a nursing program. Their goals seem to exceed their abilities. They make optimistic judgements of self-efficacy not because they have inflated ideas about their capabilities but because they do not have a good understanding of the academic task demands.

Efficacy beliefs can motivate action, but they cannot produce performance if the skills necessary for personal agency are lacking. Belief in ones learning efficacy will activate and sustain the effort needed to develop those skills. Self-inefficacious thinking retards the development of needed skills (Bandura, 1997).

In new undertakings, individuals have a limited basis on which to assess the adequacy of their self-appraisals. Having this limited familiarity with the new activity, they tend to make self-efficacy judgments partly from knowledge of what they are able to do in similar situations. Self-efficacy judgment can be distorted by faulty perceptions of one's experiences, cognitive processing of them, or during recall of experiences (Bandura, 1997).

People's beliefs about their self-efficacy constitute a major aspect of their self-knowledge. Self-efficacy beliefs are constructed from four principal sources of information: Enactive mastery experiences that are indicators of capability; verbal persuasion through performance feedback that one possesses certain capabilities, vicarious experiences that change efficacy beliefs through the transmission of competencies of others; and physiological and affective states from which individuals partly judge their capabilities, strengths, and vulnerabilities to dysfunction (Bandura, 1997).

Enactive Mastery

"Enactive Mastery experiences are the most influential source of efficacy information because they provide the most authentic evidence of whether one can muster whatever it takes to succeed"(Bandura, 1997, p. 80). Success builds confidence in one's personal efficacy. If that sense of efficacy is not firmly established, failure can undermine it. Enactive mastery develops stronger more generalized efficacy beliefs than do vicarious experiences, cognitive simulations, or verbal instruction. It involves acquiring the cognitive, behavioral, and self-regulatory tools to execute courses of action. Development is best achieved by organizing mastery experiences in ways that are conducive to the acquisition of generative skills. In children, skill transmission and success feedback alone do not enhance their efficacy beliefs, especially if they had strong doubts about their abilities. Skill transmission with social validation of personal efficacy, as in a clinical experience for the student nurse, produces large benefits. Student nurses have identified

that it is within the context of their clinical experiences that they developed and began to feel good about their ability to perform competently as nurses (Nelms, 1990).

Verbal Persuasion

Social persuasion is a means of strengthening people's beliefs that they possess the capabilities to achieve what they seek. It is easier to maintain a sense of efficacy if others convey confidence in your abilities rather than if they express doubts. Persuasory efficacy is often conveyed in the evaluative feedback given to performers. It can be conveyed in ways that undermine a sense of efficacy or increase it (Bandura, 1997). Ability feedback in the early stages of skill development has an important impact on the development of a sense of personal efficacy (Schunk, 1984). For many endeavors, people cannot rely entirely on themselves in evaluating their level of ability because those judgments require inferences from indicants of talent about which they only have limited knowledge. Self-appraisals are then based on the opinions of others who possess competence gained through years of experience in a given field. People tend to trust evaluations of their capabilities by those who are themselves skilled in the activity (Bandura, 1997). Nursing education is a source of this type of evaluative feedback leading to performance accomplishments in nurses. Performance appraisals of cultural diversity knowledge and skills can be given in the form of verbal feedback, exam scores, written feedback on term papers, clinical evaluations, and indirectly through group discussion.

Vicarious Experience

Humans have a drive to evaluate their opinions and abilities. They first attempt to evaluate their opinions or abilities through objective, nonsocial means (Festinger, 1954). Activities that produce independent objective indicants of adequacy such as running or flying an airplane have no uncertainty. Sprinters can assess their proficiency and rate of improvement from the clocked times that they run. The are no objective indicants of adequacy for some activities. If such means are unavailable, individuals evaluate themselves vicariously through comparisons with the opinions or abilities of other people (Kramer, 1968). Efficacy appraisals are, therefore, influenced by vicarious experiences mediated through modeled attainments. Modeling is when one individual assumes the attitudes and behavior patterns of another and through the psychological process of identification, effects behavior change (Kramer, 1968). Modeling serves as an effective means for promoting a sense of personal efficacy. Through social comparative inference, the attainments of others who are similar to oneself are judged to be diagnostic of one's own capabilities. Seeing people similar to oneself perform successfully typically raises efficacy beliefs in observers that they themselves possess the capabilities to master comparable activities. They convince themselves that if others can do it, they too have the capability to perform. Persons who are similar or slightly higher in ability provide the most informative comparison for gauging one's own abilities (Bandura, 1997). Modeled successes by similar others raise observers' beliefs in their efficacy, and modeled failures lower them (Bandura, 1997). Perceived self-efficacy can be changed by modeling when

people have had little prior experience on which to base evaluations of their capabilities. Even those who are highly self-assured will raise their efficacy beliefs if models teach them even better ways of doing things. People will actively seek proficient models who possess the competencies to which they aspire. Competent models transmit knowledge and teach observers effective skills and strategies. As the perceived self-efficacy increases in the observer, so does the performance accomplishments (Bandura, 1997).

Physiological and Affective States

Somatic information conveyed by physiological and emotional states assists people in judging their capabilities. These are especially relevant in physical accomplishments, health functioning, and coping with stressors. People often read physiological activation in stressful or taxing situations, such as hyperventilation or trembling, as signs of vulnerability to dysfunction. Because intense arousal can weaken and even paralyze personal performance, people are less likely to expect to be successful when they are tense or viscerally agitated. Anticipatory thoughts about their possible inability to perform, can initiate the very elevated levels of distress that produce the very dysfunctions they fear. Physiological indicators are not limited to autonomic arousal. In athletic performance, fatigue, windedness, aches, and pains are indicators of physical inefficacy. Mood states can also affect people's judgements of their personal efficacy. It can then be concluded that the way of increasing efficacy beliefs is to enhance physical status, reduce stress levels and negative emotional tendencies, and correct misinterpretations of bodily states (Bandura, 1997). Studying physiological and affective states as a source of efficacy

information is beyond the scope of this research study. Therefore, they will not be included as variables.

Model for the Study

Figure 1 illustrates a proposed model of cultural competence in nursing. It illustrates that model competence, cross-cultural experience, and performance feedback in cultural diversity education contribute to perceived cultural self-efficacy which is a mediating factor in culturally competent care. Cultural competence is theorized as promoting improved access to health care by racial and ethnic minorities which leads to the goal of increasing access to care and eliminating racial and ethnic disparities in health. A portion of this proposed model will be isolated and tested in this study. Perceived cultural self-efficacy in nursing students was depicted in a recursive model consisting of four variables: cross-cultural experience, performance feedback in cultural diversity education, model competence, and perceived cultural self-efficacy. (See Figure 2).

The model has three exogenous variables: cross-cultural experience, performance feedback, and model competence. Based on the review of literature, it is postulated that cross-cultural experience, performance feedback, and model competence contribute to perceived cultural self-efficacy.

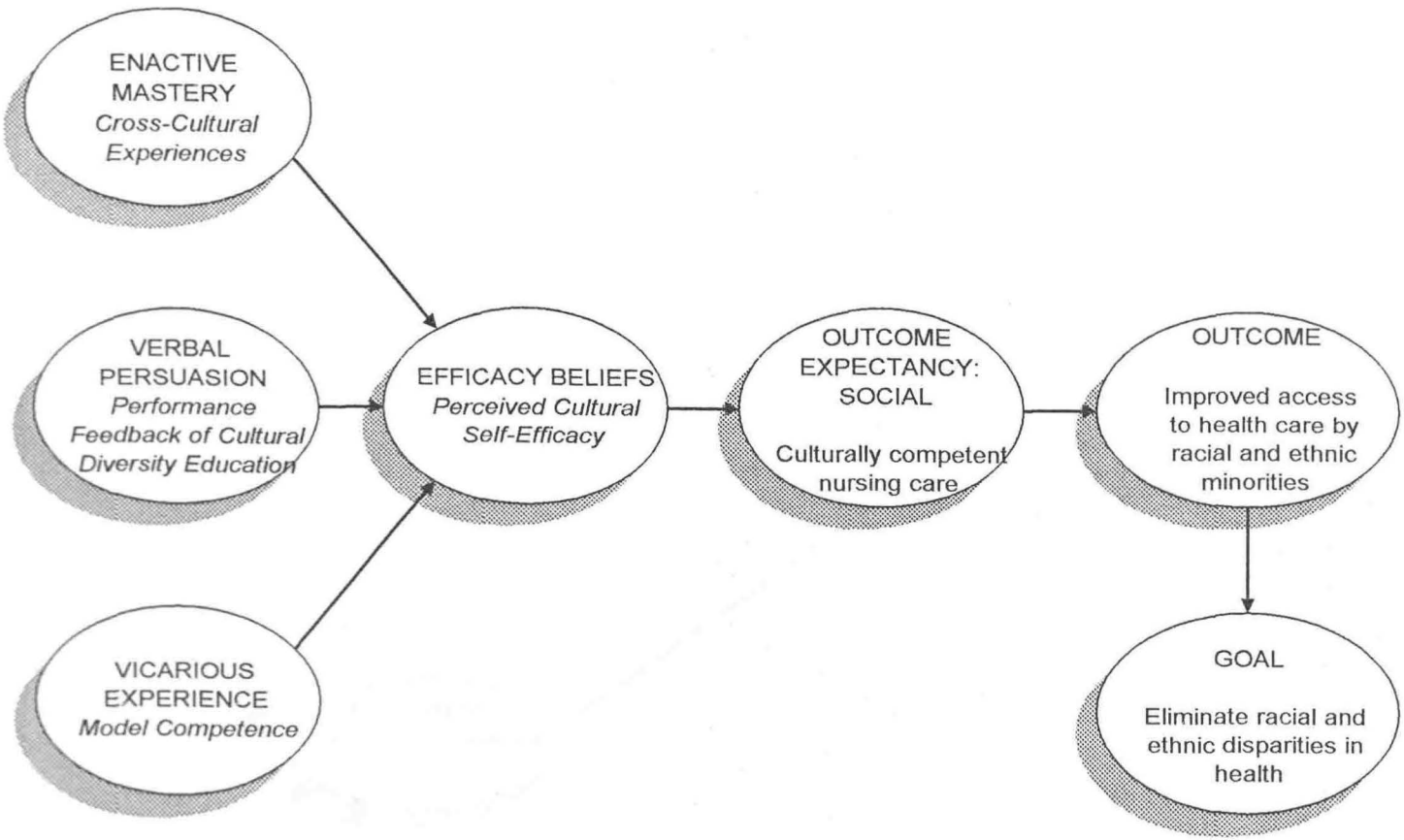

Figure 1. Proposed model of cultural competence in nursing.

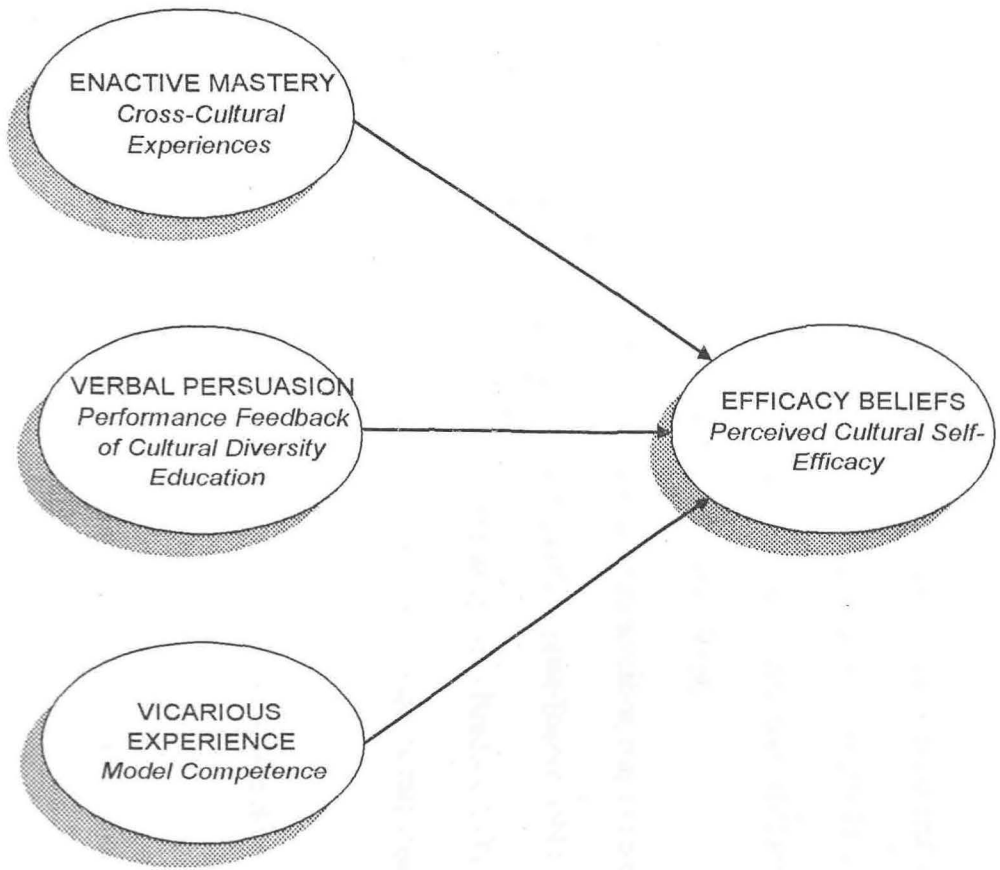

Figure 2. Model of perceived cultural self-efficacy

Assumptions

The following assumptions will apply to this study:

1. Culturally sensitive care is desirable and promotes more comprehensive health care (Spector, 1996).
2. Improved health outcomes have a higher likelihood of being realized when the health care providers provide culturally appropriate care (Pachter, 1994).
3. Providing culturally competent nursing care is a necessary skill for nurses to function in a multicultural world (Leininger, 1995).
4. Nurses who claim to be culturally aware and sensitive, may not follow-through with culturally responsive interventions (Campinha-Bacote, 1991).
5. Perceived self-efficacy promotes personal agency (Bandura, 1977; 1997).
6. Enactive mastery experiences provide authentic evidence that creates and strengthens efficacy beliefs (Bandura, 1997).
7. Competent models exert greater instructional influence than do incompetent ones (Bandura, 1997).
8. Evaluative feedback highlighting personal capabilities raises efficacy beliefs (Bandura, 1997).
9. Cross-cultural experience, performance feedback, model competence, and perceived cultural self-efficacy can be measured.

Hypotheses

1. The independent variables of cross-cultural experience, performance feedback in cultural diversity education, and model competence will explain a significant portion of the variance in a model of perceived cultural self-efficacy.
2. There is a positive relationship between cross-cultural experience and the perceived cultural self-efficacy of nursing students.
3. There is a positive relationship between performance feedback in cultural diversity education and the perceived cultural self-efficacy of nursing students.
4. There is a positive relationship between model competence and the perceived cultural self-efficacy of nursing students.

Definition of Terms

Cross-cultural Experience

Cross-cultural is used to mean "crossing," "spanning," or "interacting" with a culture other than one's own (Purnell & Paulanka, 1998). **Experience** is defined as knowledge, skill, or practice derived from direct observation of or participation in events (Gove, 1981, p. 800). Cross-cultural experience is operationally defined as the summative score on questions 7-12 on the investigator-developed Participant Profile. Foreign languages were weighted when entering data in SPSS with responses of "fluent" multiplied by 3, responses of "conversant" multiplied by 2, and responses of "minimal" multiplied by 1. Percentage of interactions with persons of different cultures and

percentage of patients cared for from different cultures were treated as whole numbers (by recoding the variable as entered times 100).

Performance Feedback

Performance feedback is evaluative appraisal of one's capabilities (Bandura, 1997). It is operationally defined as the mean score on the investigator-developed, 17-item Performance Feedback Scale.

Model Competence

Model competence is an ability to influence and teach through instructive demonstration of skills and strategies leading to increased efficacy in the observer (Bandura, 1997). It is operationally defined as the mean score on the investigator-developed, 17-item Model Evaluation Scale (MES).

Perceived Cultural Self-efficacy

Perceived cultural self-efficacy is the belief in one's ability to provide culturally appropriate nursing care to culturally diverse clients. It is operationally defined as the mean score on the 26-item Cultural Self-efficacy Scale (CSES) (Bernal & Froman, 1993).

Nursing Student

Nursing Student is a student enrolled in a nursing education program. Nursing student is operationally defined as an individual enrolled in courses of an associate or baccalaureate degree nursing education program at a community college or university.

Limitations

The sample in this study was limited to undergraduate nursing students located in the Midwestern United States. Therefore, the results of this study may not be generalizable to all nursing students or registered nurses. Respondents may have inflated or underestimated their knowledge or skills or may have given socially acceptable answers. There may have been existing biases among respondents, such as pre-existing prejudices toward one or more cultural groups under study, and inaccurate assumptions or generalizations based on personal experiences with members of another cultural group. The major threat to validity was selection. Individuals who agreed to participate may have different attributes than those who elected not to participate. Subjects can differ in quality, style, or duration of education, exposure to information; or historical events that influenced life choices and practices. Other limitations of the study included the lack of manipulation and randomization.

Delimitations

The delimitations for the study established the limits of the area to be studied. Only nursing students enrolled in associate or baccalaureate degree programs were surveyed.

Summary

Disparities in health and the growth of minority populations in the United States have placed demands on the health care system to provide health care that is culturally acceptable to racial and ethnic groups. In addition to greater client and professional levels of satisfaction, it is expected that improving the cultural knowledge and skills of health care providers will improve access to care and lead to improved client morbidity and mortality rates.

The nursing profession recognizes cultural orientation as a central aspect of each individual. Nurses provide direct care to individuals from diverse backgrounds and manage the services provided by other health care workers. However these nurses in our predominantly White health care system describe themselves as not confident in working with culturally diverse clients.

Nurses' lack of confidence in providing culturally competent care is a nursing education problem. Nursing programs vary a great deal in terms of cultural content and clinical experience. Traditional educational approaches may not consider other variables that could contribute to a student's confidence in providing culturally appropriate care. In addition to lack of agreement as to how to teach cultural competence, behavioral measures of culturally competent care are still lacking in nursing. Perceived cultural self-efficacy has been used in nursing as an indicator of the likelihood that a nurse or nursing student might provide culturally competent care.

This study proposed the need to identify sources of cultural efficacy beliefs in nursing students. The purpose of the study was to test a model that attempted to explain factors which influence perceived cultural self-efficacy in nursing students. The theoretical framework for the study was based on Bandura's construct of self-efficacy, which refers to beliefs in one's capabilities to achieve a desired effect by one's actions. There are four principle sources of self-efficacy including Enactive mastery, verbal persuasion, vicarious experience and physiological and affective states. Three study hypotheses were identified to test the relationships of the independent variables, which were proposed as sources of cultural efficacy beliefs in nursing students, to the dependent variable of perceived cultural self-efficacy.

CHAPTER 2

REVIEW OF LITERATURE

There never were in the world two opinions alike, no more than two hairs or grains; the most universal quality is diversity.

Michel Eyquem de Montaigne, 1533-1592

This chapter presents a review of the literature on selected facets of cultural self-efficacy in nursing students. Topics discussed include culture, cultural competence, cross-cultural experience, performance feedback in cultural diversity education, model competence and cultural self-efficacy as it relates to nurses and nursing students.

An Overview of Culture and Cultural Competence

Culture

Leininger (1995), a transcultural nurse, defines culture as the "...learned, shared, and transmitted values, beliefs, norms, and lifeways of a designated or particular group which are generally transmitted intergenerationally and influence one's thinking and action modes" (p.9). Culture is not biologically inherited. Leininger believes that culture is systematically transmitted from parent to child and through the socialization practices of people (1995). These practices are reinforced through cultural and social institutions and further shaped through systematic training or education (Leininger, 1995; Lynam, 1992). The roots of cultural behavior can be found in the manifest and ideal behaviors of

individuals and groups of a particular culture in a variety of human contexts and over a period of time (Leininger, 1995). Leininger further explains that the shared behaviors of a culture are a means for identification with members and provide a predicted pattern of communication based on shared communication expectations (1995).

Although a culture always includes the group's core values, culture and tradition are continually changing. For instance, each generation's attitudes and values are different from those of previous generations and are significantly influenced by their generation's times (Kupperschmidt, 1998). "There is a worldwide youth culture of rock music, Levi's, Coke, fast food, and slang. These youths communicate via the Internet. Often young people have increasingly different cultural values from their parents" (Leppert, 1997, p. 939). In spite of this, each generation is influenced by and reflective of the previous generation's attitudes and values (Kupperschmidt, 1998).

Health care providers understand the influence of culture on health, illness, and health seeking behaviors (Frye, 1991; Russell & Jewell, 1992, Leininger, 1991; U.S. Public Health Service, 1995; American Academy of Pediatrics Committee on Pediatric Workforce, 1999). The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) recognizes the importance of culture and its influence on patient education. Standard PF.1.1 of the "Patient and Family Education" chapter of the *Hospital Accreditation Standards* mandates that assessment of learning needs must include the patient's and family's cultural and religious practices, barriers to learning, and learning preferences (Joint Commission on Accreditation of Healthcare Organizations, 2002).

During every health care encounter, the cultures of the patient, provider, and medicine converge and impact upon the patterns of health care utilization, compliance with recommended medical interventions, and health outcomes (ACOG Committee on Health Care for Underserved Women, 1998).

Cultural Competence

"Culture" has come to be known as a diagnostic variable and "cultural competence" has become a growth industry (Kreier, 1999). The Pew Health Professions Commission (1995) refers to "cultural sensitivity" and urges that it be a part of the educational experiences that touches the life of every student.

There are many similar and dissimilar definitions of "cultural competence" utilized in various disciplines concerned with human services. Some defining characteristics of the concept appear over and over again in the definitions. Some definitions reflect a unique perspective in a specialized profession or interest group.

Cultural competence has been described in the field of social work as the ability to recognize the similar and distinct values, norms, customs, history and institutions of various ethnic, gender and religious groups. The culturally competent social work professional is expected to recognize sources of comfort and discomfort between themselves and clients of similar or different backgrounds. They must be able to recognize their own biases toward or against certain cultural groups and understand the impact of discrimination, oppression, and stereotyping on their practice (Poole, 1998).

Medicine identifies the need for culturally sensitive and competent care and defines it as recognizing bias, prejudice, and discrimination, using cultural resources, and overcoming cultural barriers to enhance primary care. A distinction is made between "cultural competence" and "culturally effective health care" with the former referring to the medical provider's attributes and the later referring to the interaction between the provider and the patient (American Academy of Pediatrics Committee on Pediatric Workforce, 1999).

Pachter (1996) explains that the provision of culturally "sensitive" health care by physicians involves three necessary steps: (1) developing an awareness of commonly held cultural beliefs and behaviors in the patient's community, (2) assessing how the beliefs and behaviors of this cultural group affect the patient or family, and (3) negotiating between the ethnocultural beliefs and practices of the patient and those of the culture of biomedicine. Guidelines for core curriculums in medicine advocate self-assessment of one's own cultural values, assumptions, and beliefs and how they influence the provision of care. Other recommendations include developing knowledge in the broad areas of sociocultural issues related to health care; epidemiology of health and illness of diverse population groups; and understanding of selected minority, ethnic, sociocultural, and significant at-risk groups (Like, Steiner, & Rubel, 1996).

Despite these recommendations, a survey of family practice residency programs indicated that few training programs provided any formal instruction about culture and health (Like, et al., 1996). When it comes to caring for culturally diverse clients, some

question whether or not a second-generation Mexican American physician exposed to influences including Oprah Winfrey, David Letterman, Peter Jennings, and Rush Limbaugh can truly understand the perspectives of a recent Mexican immigrant (Zweifler & Gonzalez, 1998).

Definitions of cultural competence embraced by managed care organizations incorporate an epidemiological perspective and population-based focus which include health-related beliefs and cultural values, disease incidence and prevalence, and treatment efficacy (Lavizzo-Mourey & Mackenzie, 1996). Lavizzo-Mourey & Mackenzie (1996) assert that in order to provide culturally competent care and be truly effective, managed care organizations must accept responsibility for all the populations they enroll and maintain a flexibility in diagnostic and treatment protocols and drug formularies.

Nursing has recognized a need for defining and developing criteria for culturally competent care. Between 1991 and 1995 the American Academy of Nursing (Lenberg, 1995) convened a subpanel on Cultural Competence in Nursing Education. This panel was one of three initial panels organized under the Academy's Expert Panel on Culturally Competent Care which focused on a broad array of issues and concerns primarily in the practice area (American Academy of Nursing Expert Panel on Culturally Competent Care, 1992). In their analysis of issues a glossary was developed and reviewed by nurse experts. They defined cultural competence as:

> A complex integration of knowledge, attitudes and skills that enhances cross-cultural communication and appropriate/effective interactions with others. It

> includes at least three perspectives: (1) knowledge of the effects of culture on others' beliefs and behavior, (2) awareness of one's own cultural attributes and biases and their impact on others, and (3) understanding the impact of the socio-political, environmental and economic context on the specific situation. It also includes an individual's ability to translate these perspectives (knowledge) into communication and interactions with other individuals and groups that integrate respect for cultural variation (Lenburg, 1995, p. 35).

Nursing has traditionally espoused a holistic philosophy of nursing care with a focus on the biopsychosocial individual within his or her environment. Advocating the uniqueness of each person, the expectation in nursing is that the client has a right to expect consideration for their individuality when nursing care is provided. Inherent in this uniqueness is the individual's contextual and group culture. For these reasons, nursing, in theory, seeks to provide individualized, culturally appropriate care.

Campinha-Bacote (1991) offers the "Culturally Competent Model of Care" in which cultural competence is viewed as a *process*, not an end-point, in which an individual/agency continuously strives to achieve the ability to effectively work within the cultural context of an individual, family or community from a diverse cultural/ethnic background. This conceptual model of care incorporates cultural awareness, cultural knowledge, cultural skill, cultural desire, and cultural encounter as constructs of cultural competence (Campinha-Bacote, 1999).

The members of the subpanel on Cultural Competence in Nursing Education (Lenberg, 1995) are committed to the goal of restructuring education programs so that the development of cultural competence is deliberately emphasized as part of professional nursing practice. A plan was developed which encompasses reforms needed in content and process for all types and levels of programs (Lenburg, 1995).

Terms Related to Cultural Competence

Many authors freely interchange cultural competence with terms such as cultural sensitivity, cultural awareness, transcultural nursing, and cultural effectiveness. It promotes hazy constructs with unclear meanings. Some of the terms are highly related and appear in the multicultural literature as though they were synonymous. Continual inattention to language precision acts as a hindrance to the communication of ideas, the formulation of testable hypotheses, and the advancement of knowledge (Ridley, Mendoza, Kanitz, Angermeier, & Zenk, 1994). The following terms are related to but are not considered synonymous with cultural competence:

Cultural awareness: appreciation and sensitivity for the values, beliefs, and practices of a client's culture. It also includes the health care provider's understanding of his/her own culture and how this affects their perception of culturally diverse clients (Campinha-Bacote, 1991). It is considered to be a component and a foundation for cultural competence (American Academy of Pediatrics Committee on Pediatric Workforce, 1999; Campinha-Bacote, 1991).

Cultural sensitivity: It is also known as "Cultural Precompetence." It includes an awareness of cultural values, norms, and beliefs and how these impact a cultural group. There is a desire and attempt made to deliver services in a manner respectful of cultural diversity (Randall-David, 1994). Cultural sensitivity is only one aspect of culturally competent care (AAN Expert Panel on Culturally Competent Nursing Care, 1992). This refers to the provider's attributes and does not include the provider's cultural self-assessment, cultural skill in client assessment, or competency in cultural encounter.

Cultural brokerage: the act of bridging, linking, or mediating between groups or persons for the purpose of reducing conflict or producing change. In health care it includes brokering between patients and members of the conventional health care system (Jezewski, 1990). Cultural brokerage may be an indicator of cultural competence (Smith, 1998a).

Cultural care: The learned and transmitted values, beliefs, and patterned lifeways that assist, support, facilitate, or enable another individual or group to maintain their well being, health, to improve their human condition and lifeway, or to deal with illness, handicaps, or death (Leininger, 1991). Cultural care does not include a cultural self-assessment by the provider or suggest a level of competency.

Intercultural effectiveness: A concept associated with overseas job performance which includes the underlying dimensions of interpersonal skills, social interaction, cultural empathy, personality traits, and managerial ability (Cui & Awa, 1992). The focus is on attributes of the employee and does not include a self-assessment or cultural knowledge.

Intercultural communication competence: An impression that behavior is appropriate and effective in a given context (Spitzberg, 1994).

Culturally sensitive health care: The awareness of the commonly held cultural beliefs and interactive styles in the patient's cultural group, an understanding of how the beliefs and behaviors of a cultural group affect the patient or family, and the negotiation between ethnocultural beliefs and practices of the patient and those of the culture of biomedicine (American Academy of Pediatrics Committee on Pediatric Workforce, 1999). This definition does not include self-assessment by the provider and is specific to medicine.

Cultural Proficiency: Having the motivation toward adding to the knowledge base of culturally competent practice, developing culturally therapeutic approaches, and hiring staff who are specialists in cultural competence (Rorie, Paine, & Barger, 1996). This definition is specific to health care and suggests the role of a cultural specialist.

Measuring Cultural Competence

Enhancing health care professionals cultural knowledge and skills holds potential for influencing culturally competent care outcomes (Jones, Bond, & Cason, 1998). However, there is little evidence in the health care literature related to behavioral measurements of cultural competence in health care providers (Weaver, 1999; Jones, et al., 1998). "Behavioral competencies are best assessed through behavioral measures--measures of competency that reflect an individual's ability to display concepts in his behavior rather than his intentions, understandings, knowledge, attitudes, or desires" (Ruben, 1976, p. 337). The lack of research in cultural competence may be influenced by

the fact that few of us regularly behave in a manner that is totally consistent with what we know, believe, understand, or intend. Motivation, good will, and appropriate intentions are poor predictors of effective outcomes. The lack of research in this area might also be due to the current trend for political correctness which tends to limit the examination of complex cultural issues thereby undermining human variety and segregating people into hostile communities (Poole, 1998).

Due to the challenges associated with measuring cultural competence, the researcher chose to focus on cultural self-efficacy as a means of predicting cultural competence in nursing students. The next sections will discuss factors which are proposed to influence cultural self-efficacy in nursing students.

Enactive Mastery: Cross-cultural Experience

Enactive mastery is a factor identified by Bandura (1997) which contributes to self-efficacy. "Enactive mastery involves acquiring the cognitive, behavioral, and self-regulatory tools for creating and executing effective courses of action to manage ever-changing life circumstances" (Bandura, 1997, p. 80). This development is facilitated by breaking down complex skills into easily mastered subskills and organizing them hierarchically. By having the opportunity to apply rules and strategies consistently and persistently, individuals are persuaded that they can exercise control. Having knowledge and skills does not produce high attainments if people lack the self-assurance to use them well (Bandura, 1997). Skill transmission with social validation of personal efficacy, as in a clinical experience for the student nurse, produces large benefits. Student nurses have

identified that it is within the context of their clinical experiences that they developed and began to feel good about their ability to perform competently as nurses (Nelms, 1990).

Cross-cultural encounter encourages directly engaging in interactions with clients from diverse cultural backgrounds. This enables the nurse to refine or modify existing knowledge about that cultural group (Campinha-Bacote, 1991). The term "cross-cultural" is considered to be more global, interdisciplinary, and generic than transcultural or intercultural (American Academy of Nursing Expert Panel on Culturally Competent Nursing Care, 1992). Cross-cultural encounter may include educational experiences or employment experiences. It can be learning a foreign language or living and/or working outside of the United States. It can involve living in a culturally diverse neighborhood or attending a school with a multicultural student body and faculty.

Cross-cultural experience has been defined in previous studies as an interaction with someone whose cultural background differed from that of the nurse and it was operationalized as the percentage of patients cared for whose cultural background differed from that of the nurse. Over 53% of the nurses indicated that 21% to 60% of the patients they cared for were culturally different from themselves, while 19.4% reported that more than 60% of their patients were culturally different (Rooda, 1993).

While they didn't offer a theoretical definition of cross-cultural experience, Bernal and Froman (1993) did operationally define "cross-cultural exposure" as "the sum of responses to four questions regarding the number of years the respondent had lived outside the U.S., the number of foreign languages spoken, experience in the Peace Corp (0

= no experience, 1 = experience), and other work experience outside of the U.S. (0 = no experience, 1 = experience)" (p. 27). Textbooks don't prepare the student for the time and effort involved in establishing trusting, therapeutic relationships. Satisfying experiences for students include being admitted to cultural practices not casually shared with strangers. These are earned through developing relationships and establishing trust between the student and the client or community.

Professors in undergraduate Community Health Nursing point out that students' clinical (in contrast to classroom) abilities to deal with human diversity are not well developed, and they suggest a need for more clinical experiences. Anecdotal reports from nursing graduates support this evaluation, claiming that lessons learned as students begin to be implemented only after 3-5 years of experience in nursing practice (Chrisman, 1998).

Research Studies: Cross-cultural Experience

Pope-Davis, Eliason, and Ottavi (1994) studied undergraduate nursing students' multicultural competencies in working with culturally diverse clients. The setting was an educational institution with participants reporting information about ethnic background, age, gender, academic class standing, field of study, and work experience. The sample consisted of 120 undergraduate nursing students (112 women and 8 men) from a lifespan development psychology course in the College of Nursing at a large Midwestern university. Ninety-six percent of the participants were White. Sixty-seven percent of the participants indicated that they had no work experience in the nursing field. Of the 33% who had experience in the nursing field, half had worked with a minority client within the

last three months and the other half had worked with a minority client more than three months previously (Pope-Davis, Eliason, and Ottavi, 1994).

The participants were asked to complete the Multicultural Counseling Inventory (MCI) adapted for nursing students and a demographic questionnaire that was also developed for the investigation. The MCI was developed to measure self-reported multicultural competency areas. These areas are measured on four subscales: (a) Skills: 11 items measuring general interpersonal skills and specific multicultural interpersonal skills, (b) Knowledge: 11 items measuring care planning, conceptualization of client problems, and multicultural health care research, (c) Awareness: 10 items measuring multicultural sensitivity, multicultural interactions, and advocacy in everyday life activities and professional activities, and (d) Relationship: 8 items measuring nurses' interaction with minority clients (e.g., comfort level, world view, trustworthiness). The instrument was administered during two concurrent academic semesters. Scores were interpreted with reference to the four-point Likert scale. Mean scores ranged from 1 to 4 for each subscale (Pope-Davis, Eliason, and Ottavi, 1994).

To determine whether nursing students' self-reported multicultural competencies differed with respect to demographic variables, multivariate analysis of variance (MANOVA) and univariate analysis of variance (ANOVA) were conducted. Scores indicated that students who have had some work experience had significantly more self-perceived Multicultural Skill and Knowledge but not more Multicultural Awareness or Relationship than students who have had no work experience. None of the nursing

students who participated in this investigation had completed a course or seminar addressing multicultural issues in nursing. The authors speculate that these students may have acquired a false cultural awareness based on stereotypes. Also, they may have developed a set of general skills and knowledge for the work environment without fully comprehending why these skills are necessary. The authors also explain that students may in fact accept the universal principle and truly believe that they treat all clients alike and therefore perceive themselves as interacting the same with all clients without consideration for cultural differences. They may have the knowledge and skills to care for clients without any awareness or sensitivity that culturally diverse clients may have unique needs. Despite these limitations, the researchers conclude that the study does suggest a relationship between work experience and multicultural competence of nursing students. The researchers note that the low number of students with work experience (33%) is a limitation in the study (Pope-Davis, Eliason, and Ottavi,1994).

Related Concept: Experiential Learning

Experiential learning is a concept related to cross-cultural experience and is characterized by the involvement of each individual student in his or her own learning. It is direct encounter with a subject, person, or thing. The subjective and affective nature of that encounter contributes to experiential knowledge. Any learning methods that involve the self and personal knowledge are likely to enhance personal effectiveness (Burnard, 1995). This type of knowledge involves standing in relation to another person and

encountering that human being as a person. Experiential learning addresses the affective, as well as the cognitive domain of learning.

Verbal Persuasion: Performance Feedback in Cultural Diversity Education

Social persuasion is a means of strengthening people's beliefs that they possess the capabilities to achieve what they seek. Persuasory efficacy is often conveyed in the evaluative feedback given to performers. Nursing education provides opportunities for this type of performance feedback leading to performance accomplishments in nurses. Performance feedback is the second independent variable identified for this study and is examined in relation to cultural diversity education.

Cultural Diversity Education in Nursing

"Cultural diversity" is the term often given to the component of nursing education in which student nurses are given information about the variety of individuals whom they will treat and the social phenomena and cultures they represent (Brink, 1994; Tullmann, 1992). It can also refer to the racial, national, and ethnic diversity of the nursing school student body and faculty (Brink, 1994).

The subpanel on Cultural Competence in Nursing Education made up of members of the American Academy of Nursing defined cultural diversity as the coexistence of several or many ethnic/subcultural groups in a geographical locality or organization. They point out that "cultural diversity" has been used loosely by individuals who represent the

dominant Euro-American subculture to signify anyone not from this dominant culture (Lenburg, 1995).

Leininger (1977) defined cultural diversity as "the overt and covert differences among people of different population groups with respect to their values, beliefs, language, physical characteristics, and general patterns of behavior" (p. 9).

In 1983, The National League for Nursing offered criteria to guide nursing programs in providing cultural diversity education (Campinha-Bacote, 1998). A concerted effort was made by nursing programs throughout the country to provide curricula that demonstrated respect of cultural, racial, and ethnic diversity.

The National Advisory Council on Nurse Education and Practice (1996) identified a policy goal that the Federal government should support educational activities to increase cultural sensitivity and cultural competence in nursing students. The American Nurses' Association (1986) offered specific guidelines for implementation of cultural diversity in the nursing curriculum which included descriptions of four approaches to meet this objective. They identified objectives for a *culturally diverse* curriculum in schools of nursing:

1. To prepare students to give safe, effective care to clients from diverse backgrounds based on knowledge of the client's ethnic and sociocultural perspective.
2. To provide students with an opportunity to develop understanding of their own culture and of the degree to which they are conditioned by it.

3. To assist students to develop an appreciation and acceptance of individuals with different values, life-styles, and religious and ethnic backgrounds.
4. To help students gain the ability to seek information about the family roles, beliefs, and practices of their clients; the meaning of health and illness to the family unit; and cultural healing practices and beliefs.
5. To foster the integration of cognitive and affective learning with experiential learning so that students develop an understanding of cultural differences.
6. To assist students to develop sensitivity and respect in caring for culturally diverse patients who do not conform in values, beliefs, and mores to the majority group (American Nurses' Association, 1986).

The best known nursing model for teaching cultural diversity in nursing is Leininger's transcultural nursing. Leininger coined the phrase "transcultural nursing." Leininger has published more than 300 works in the field which originated with her research while earning a doctorate in anthropology almost 30 years ago (Mahon, 1997). Leininger regards nursing as a transcultural care phenomenon and a lived experience. She explains that in order to provide cultural care, nurses need a comparative view of cultural differences and similarities, in addition to the biopsychosocial view (Leininger, 1991).

Andrews (1995) calls for cultural diversity education to first emphasize universal human experience and common needs. Second, educators should allow for individual and

group cultural differences and for changes in cultural norms over time. Third, faculty should guide students through a culturological self-assessment. Fourth, prejudice and discrimination should be dealt with in a firm, proactive manner. Faculty should also serve as mentors and role models for students. Fifth, all nursing care is transcultural and it should be reflected in the curriculum, transcultural nursing principles, concepts, theories and research. Other theories should be critiqued from a transcultural perspective.

In addition to a comparative view of differences and similarities of racial and ethnic cultures, nurses need to understand the health care culture. The seeking of self awareness about nursing's own culture is important in the education of the nursing student. The nurse is socialized into a distinct provider culture where that culture instills in its members its own norms regarding health and illness (Spector, 1996).

Typical course content in cultural diversity is usually introduced early in a nursing program and might include dietary practices, perceptions of illness, family roles, biologic variations, differences in disease, beliefs about childbirth and death, and values of the dominant and minority cultural groups. Upon completion of such a course, a student nurse would be expected to have an increased awareness of how to care for patients from a variety of cultural backgrounds and would be required to include a cultural component in their nursing care plan.

There are difficulties encountered in attempting to offer cultural diversity education in nursing. Few minority clients may be served by health care agencies where students are located. Availability of these clients in acute care settings may be sporadic.

Community nurses may be unwilling to introduce students into their own established relationship with a client for fear of disrupting that relationship. Some of the clients may be struggling with problems that involve social service agencies not willing to have students be a part of the care at that time (Williamson, et al.,1996).

Cultural diversity can be taught in nursing as a separate course, a unit within a course, or as a conceptual thread running through the program. An entire nursing program can be devoted to transcultural nursing. There are several graduate programs in transcultural nursing in the United States (Reynolds & Leininger, 1993).

Single courses vary in emphasis on didactic and clinical experience in cultural diversity with some even including extensive field experiences among diverse cultures. Other teaching methods may include travel/study abroad, transnational student/faculty exchanges, field/clinical experiences involving people from various cultures, lectures, seminars, clinical conferences, individual cultural assessments, community assessments, essays, projects, reports, films, case studies, role playing, simulations, games, dramas, songs, literature, journaling, community health fairs, food, ethnic festivals, fashion shows, research (Andrews, 1995; Bartz, Bowles, & Underwood, 1993; Capers, 1992; Fernandez-Santiago, 1994)

Informal cultural diversity education occurs within a heterogenous (ethnicity, gender, age) faculty and student population when shared personal experiences enhance classroom learning (Bartz, et al., 1993). However, minorities are disproportionately represented in admissions to basic registered nursing education with African Americans,

11.1%; Hispanics, 3.2%; Asians, 3.0%; and Native Americans, 0.6% (National League for Nursing, 1991).

There is a need for culturally diverse faculty to teach nursing students in order to enhance the educational experience. This can be accomplished by hiring qualified faculty from different racial and ethnic groups, recruiting faculty from other countries, or by pursuing faculty who have extensive experience with or knowledge of other cultures (Brink, 1994).

The predominant belief system in education appears to view cultural diversity education as still somewhat unimportant. Brink (1994) expressed it in this way:

> I can just hear some of my colleagues saying, "I think cultural diversity is very important, and I stress to all my students that they must assess the cultural variable!" My rejoinder would be, "Good! Then on your list of curricular priorities, of what students absolutely must know to graduate from your school, where do you place cultural diversity? In the top 10? In the top 20? The top 30?" Then I would ask, "Other than demanding that your student assess the cultural variable, how do you assist them to learn how to do that in your clinical setting? Please tell me, step by step, what you do." Although some faculty would be able to describe specific teaching techniques, most would not (Brink, 1994, p. 658-659).

Leininger cautions that many nursing faculty with no formal preparation in transcultural nursing or in anthropology, consider themselves "international experts"

because of some brief cultural encounters or Peace Corps experiences in another country. Missing dimensions of their "expertise" include lack of knowledge of cultures and lack of self-awareness. Many Western faculty visiting foreign countries to influence non-Western curricula in schools of nursing lack knowledge about the cultural history of the people, gender issues, and the general lifeways of the people they are visiting. Non-Western nursing faculty employed in these schools have expressed that they have experienced cultural imposition, cultural dominance, and cultural clashes with ideas and practices of faculty visiting from Western nursing institutions. While faculties from non-Western cultures remained polite and hospitable to their guests, they expressed that they still experienced cultural pain and resentment at being pushed to accept "Western" ideas about nursing that did not fit their culture. They also found that Western faculty had limited knowledge about folk (generic) health care practices and cultural taboos and were unable to assess and use them in teaching and practice. Non-Western faculty saw the need for Western nursing faculty to be mentored by transcultural nursing experts (Leininger, 1998).

Several factors can influence the inclusion of cultural content in the curriculum including the values and beliefs in the nursing philosophy and conceptual or organizing framework. Several curricular factors can also influence the inclusion of cultural content: (a) integrated versus nonintegrated curriculum, (b) horizontal and vertical threads, (c) type of educational program, and (d) medical model versus holistic models as orientations. Providing cultural diversity content in a nonintegrated curriculum (i.e. medical-surgical, pediatric nursing) can be a challenge when the clinical setting or age group is the focus.

Identification of culture as a horizontal and/or vertical thread in the conceptual framework will influence how the content is developed in the curriculum (Capers, 1992). Baccalaureate programs may have more depth in cultural content than associate degree programs because of liberal arts courses and electives. Curriculums that follow the medical model tend to only address epidemiology and limit the amount of content on cultural diversity (Capers, 1992).

An indicator of professional interest in a topic is the number of books in the area. U.S. publishers are reluctant to publish books on cultural diversity for nursing simply because they have not sold well in the past. This suggests that the number of courses to support the texts is insufficient. Faculty may rely on a chapter in an existing textbook to cover the information, suggesting that cultural diversity information is limited (Brink, 1994) or that limited resources dictate condensation of program content into one comprehensive textbook. Textbooks which have survived focus on a "cookbook" approach: "This is a Black client; this is how to nurse him" (Brink, 1994). In reality this emphasizes homogeneity rather than diversity (Brink, 1994; Charonka, 1992). With the cookbook approach there is a risk of "emphasizing the exotic or over-romanticizing cultural behaviors or beliefs" (Jones, et al., 1998, p. 5). There is more diversity within than across cultures. Treating all patients alike with a disregard for diverse needs is unsafe (Fong, 1985).

In addition to the above shortcomings, lectures alone in nursing programs are not sufficient to teach cultural diversity content. The student must have opportunities to apply

that knowledge in the clinical setting. Bartz, et al. (1993) explain that "...without the opportunity to care for culturally diverse clients, it is as though students were instructed in physical assessment but never given the opportunity to listen to heart or lung sounds" (p. 233). Nurses who do not feel confident in a task will avoid and fail in that task. Therefore, nurses need experiences that build confidence in their ability to perform care for culturally diverse groups (Bernal & Froman, 1987).

Performance Feedback of Cultural Diversity Education

For many activities, individuals cannot rely solely on themselves in evaluating their level of ability because such judgments require inferences from indicants of talent for which they may only have limited knowledge. Persuasory efficacy information is often conveyed in the evaluative feedback given to performers. Evaluative feedback highlighting personal capabilities raises efficacy beliefs when focused on achieved progress. (Bandura, 1997).

Students may receive performance feedback on cultural diversity competency from nursing instructors in the form of pre- and post-tests, comments on scholarly papers or feedback during post-conference and clinical performance appraisals. Performance feedback may be given in terms of how well course objectives were met. When providing performance feedback to students, nursing faculty may be challenged to identify absolute factual data associated with cultural content that can be incorporated into multiple-choice questions for exams. Because the goal of a course is often to influence views and attitudes, multiple-choice may not be appropriate. Essay questions may better evaluate

effective learning related to attitudes. Grading can be based on the breadth of the response and rationale provided rather than on the "rightness" or "wrongness" of the answer (Capers, 1992).

Research Studies: Performance Feedback in Cultural Diversity Education

The following two studies represent research related to evaluation and performance feedback in cultural diversity education. Both studies incorporated pre- and post-testing after cultural diversity education. Although feedback was not the primary intent in these studies and the intervention did not result in significant differences in post-test scores, this type of testing does provide performance feedback to the participants. Studies involving performance feedback to nursing students in cultural diversity education were not found in the literature.

Flavin (1997) adapted a previous study and developed a research-based Cross-Cultural Training (CCT) to educate home care nurses in Hawaii about the beliefs, values, and practices regarding illness and dying among the Filipino, Hawaiian, Japanese, and gay-Caucasian communities. Dependent variables were learning, behavioral, and reaction criteria. The CCT consisted of three educational sessions combining behavioral and cognitive approaches to cross-cultural learning. Training methods included:

1. A panel presentation by local ethnic and cultural experts.
2. A video-taped behavior modeling session combined with skill practice.

3. A modified cultural assimilator technique which required nurses to read short intercultural incidents followed by relevant questions with multiple choice alternative interpretations (p. 122).

The sample consisted of 11 staff persons which included eight nurses, one occupational therapist, one physical therapist, and one social worker. Seven were Caucasians, one was Hawaiian/part Hawaiian, one was Japanese, one was Filipino, and there was one Other. The number of years lived in Hawaii ranged from three to 34 years. The number of years in health care practice ranged from seven to 30 years (Flavin, 1997).

Pre-and posttest measures included 12 items for learning measures developed for the local CCT. The pretest learning measures were intended to assess the nurses' knowledge of practices and values of the four targeted cultures. Items were developed based on incident accounts from nurses in hospice and home care, literature review, and consultation with cultural experts. Items of the pretest and posttest learning measures were summed to obtain a total learning score for each test. It was assumed that a greater number of correct items would reflect a higher level of learning. A t-test for correlated groups was used to analyze the effect of the training on learning. Behavioral measures were based on self-evaluation pretest and posttest essay accounts. In the pretest measure, the participant was asked to write a brief account of a nursing encounter with a person or family from one of the focal cultures in which, due to lack of cultural understanding, discomfort resulted for the persons concerned. Six of the nurses who completed the pretest responded with a personal account (Flavin, 1997).

In the posttest measure, the participants were asked to write a brief account of a nursing encounter in which the relationship was enhanced by the CCT experience. Six of the 11 participants offered personal accounts of behavioral growth. The posttest accounts were evaluated for evidence of empathy, appropriate verbal or nonverbal responses, and acknowledgment of appreciation by patient and/or family. Ethnic experts assisted in determining the evaluation ratings. Reaction measures were part of the posttest handout. Nine items were developed to measure three dimensions including design of the program, degree to which the expectations of the participants were met, and the relevancy of the information covered. Reactions to the CCT were rated on a 5-point Likert-type scale (Flavin, 1997).

Results of Flavin's study (1997) indicated that years lived in Hawaii and years in nursing practice did not correlate with pretest learning scores. No significant difference was found between the learning scores of the group prior to and after the CCT program. Ratings for the behavioral measures ranged from 3.5-5 with a mean score of 4.6. Five-point scale ratings for the reaction measures were totaled for each question and the means calculated. Overall means were Design (4.15), Opinion (4.25), and Information (4.52). The researcher attributed the lack of significant positive results from the learning measures to the generally high scores in the pretest measures. Acculturation and nurses' daily interaction with people from these cultures may have contributed to study results. Home health agency staff felt that the combined cognitive and experiential approaches had increased their learning, increased their skills in interacting with the focal cultures, and

their overall satisfaction. These results were corroborated by positive comments made by the participants during and after the training sessions (Flavin, 1997).

Campinha-Bacote (1999) developed the Inventory to Assess the Process of Cultural Competence Among Healthcare Professionals (IAPCC). The IAPCC is a 20-item instrument that measures the constructs of cultural awareness, cultural knowledge, cultural skill, and cultural encounters and is based on Campinha-Bacote's conceptual model of Cultural Competence. Campinha-Bacote does not attempt to measure the new construct added to her model of Cultural Competence: Cultural desire. There are five statements addressing each of the four original constructs. Examples given were, "I am aware of the biological variations among different ethnic groups" and "It is more important to conduct a cultural assessment on ethnically diverse clients than with other clients." The instrument is self-administered and uses a four-point Likert scale which reflects the response categories of "strongly agree to strongly disagree," "very knowledgeable to not knowledgeable," "very comfortable to not comfortable," "very aware to not aware," and "very involved to not involved."

The IAPCC was field tested with 15 RNs in an acute care hospital setting in the southern United States. Thirty percent of these nurses were prepared at the master's level, while 70% were prepared at the bachelors level. Content validity was addressed by review of the instrument by five national health care experts in the fields of transcultural health care and transcultural nursing. Construct validity was established using the known-groups technique with a sample of 200 RNs who participated in an all-day workshop on

cultural competence in health care. Each subject's pretest score on the IAPCC served as the control. Posttest scores revealed an increase in the level of cultural competence after the workshop, and the author concluded that there was construct validation of the instrument (Campinha-Bacote, 1999).

Campinha-Bacote (1999) explains that a limitation of the IAPCC is the reliability. The split-half technique for assessing internal consistency of the IAPCC did not yield a viable correlation coefficient. She attributes this to possible response set biases, instrument clarity, or instrument format. Campinha-Bacote explains that another potential limitation of the instrument is its use as a posttest measure of cultural competence. If it is to be used for this purpose, the training prior to administration of the IAPCC should be based on the conceptual model of cultural competence as defined by Campinha-Bacote that uses constructs of cultural awareness, cultural knowledge, cultural skill, and cultural encounters.

Related Concept: Mentoring

Social appraisal is integrated in the related concept of mentoring. Mentoring, unlike role modeling, which is primarily a passive process, is an active involvement within a close, long-term personal relationship. Mentors serve as counselors, teachers, sponsors, and guides (Bidwell & Brasler, 1989) while role models may not even be aware that they are role models. Mentors serve as role models, but they also actively encourage professional socialization. They facilitate the adjustment of a neophyte to the realities of the work place and both parties benefit and derive satisfaction from the relationship.

(Bidwell & Brasler, 1989). The one-to-one relationship of the mentorship focuses on the development of the protégé. The mentor, who is accomplished and more experienced enhances professional skills and intellectual development of the mentee. Like the verbal persuasion of cultural diversity education, the helper in the dyad assists in bringing about new or changed behavior through feedback, both positive and negative (Hamilton, 1981; Washington, 1997). The mentor may serve as a "cheerleader" as they encourage the growth of the mentee (Washington, 1997). It includes privileged communication and is a nurturing, interactive relationship that fosters self-development (Hamilton, 1981; Washington, 1997).

Vicarious Experience: Model Competence

Vicarious experiences mediated through modeled attainments influence personal efficacy. People turn to proficient models who possess the competencies to which they aspire. Proficient model attributes would likely include a high self-efficacy for that same knowledge, skills, and effective strategies the observer is seeking. The impact of performance feedback on efficacy beliefs is only as strong as the recipient's confidence in the person who issues the feedback. The more believable the source of information about one's capabilities, the likely the judgements of personal efficacy will change or will be held strongly. People don't always believe what they are told about their abilities. Skepticism may develop based on their own personal experiences. When individuals are more confident in their own self-appraisal than in the judgement of another, they are not swayed by what they are told about their capabilities (Bandura, 1997). Perceived competence of

the nursing role model is used as the measurement variable for model competence and vicarious experience in this study.

Clinical objectives in nursing tend to be broad and for nursing students, these may not represent adequate indications of their own competency as future nurses. The student nurse may appraise their capabilities vicariously in relation to the skills of others whom they see as similar or dissimilar to themselves, in this case, nursing role models. When adequacy is gauged in relation to the performance of others, social comparison operates as a primary factor in the self-appraisal of capabilities (Bandura, 1977; Festinger, 1954). Through social comparative inference, the attainments of others who are similar to oneself are judged to be diagnostic of one's own capabilities. Persons who are similar or slightly higher in ability provide the most informative comparison for gauging one's own capabilities (Festinger, 1954). Models who are adept at demonstrating valuable skills can also raise the perceived learning efficacy (Schunk & Hanson, 1985). A competent model will command more attention and exert greater instructional influence than an incompetent model (Bandura, 1986). Model competence is especially important when observers have a lot to learn and models have much they can teach them through instructive demonstration of skills and strategies. The dissimilar model will increase efficacy in the learner through progressive mastery of modeled skills. Through observational learning, the perceived similarity to the initially dissimilar proficient model increases (Bandura, 1997).

People seek proficient models who possess the competencies they wish to achieve. Through their behavior and expressed ways of thinking, competent models transmit

knowledge and teach observers effective skills and strategies (Bandura, 1986). Clinical role models are instrumental in directing the progress of the nursing profession and in forecasting the quality of nursing practice (Kramer, 1968). Students identified occasions when they learned caring by observing and imitating nursing staff involved in interactions with patients (Kosowski, 1993). Nursing students may also model themselves on the caring teacher, internalizing the instructor's values and outlook (Halldorsdottir, 1990).

If nursing faculty lack confidence and are unprepared to teach cultural diversity content (Brink, 1994), they may also be unprepared to model cultural care. Students may realize they have no model for their own social comparison. Faculty who have low cultural self-efficacy and cannot apply cultural content will be poor models and impede the development of cultural skills in their students. Culturally relevant assessments and interventions cannot be supervised and evaluated by faculty who are not themselves prepared and knowledgeable in this area.

Christman (1998) suggests that students seldom observe instructors modeling caring for patients. The deliberate separation of service and education has had a marked effect on nursing practice. Unlike other clinical professions with practitioner teachers, the distance of nurse faculty members from direct care blunts the stimulus of knowledge. Because most faculty are not practitioner teachers, as physicians and dentists are, patients rarely receive care from well-educated nurses.

Research Studies: Model Competence

American nurses know very little about cultural diversity and are not taught much about the topic (Brink, 1994). Evidence in the literature confirms that nurses in practice do not feel very confident about caring for clients from cultures other than their own.

Bonaparte (1979) examined nurses' attitudes toward culturally different patients. The sample consisted of 300 actively employed female registered nurses representing four cultural groups (White Anglo-Saxon, Black, Jewish, and Hispanic). Bonaparte developed the Cultural Attitude Scale (CAS) to measure nurses' attitudes, ego defensiveness and open-closed mindedness. The CAS consisted of a 34-item Likert type, forced-choice questionnaire, consisting of four vignettes which describe three minority cultural clients–Hispanic (Mr. Rivera), Jewish (Mr. Cohen), Black (Mr. Clark)–and the dominant White group (Mr. Andrews). The vignettes described the family unit, type of employment, church affiliation, health-care practices, and leisure activities of the patients. The factor analysis of a pilot study (N = 50) revealed three statistically independent factors underlying registered professional nurses' attitudes toward minority clients. Nursing Care-Patient Interaction accounted for 54% of the common factor variance for rotated factors. The second factor, Cultural Health Behavior, accounted for 30 percent of the common factor variance and Cultural Health Attitudes and Beliefs, the third factor, accounted for 16%. Results of the larger study (N = 300) using principal factors analysis led Bonaparte to conclude that when confronted with clients who hold cultural health beliefs and practices which are unfamiliar, open-minded nurses would be more likely to

seek information about those different practices which would be helpful in planning nursing care. Close-minded nurses may consciously avoid culturally different clients because there different beliefs and practices may be in conflict with the scientific approach and may be anxiety producing for the nurse. Bonaparte reasoned that nurses caring for clients of different health care beliefs, values, and practices were more likely to have negative attitudes toward those clients. Therefore, culturally competent care is affected by nurses' attitudes toward patients of different cultures (Bonaparte, 1979).

Rooda (1993) examined the knowledge and attitudes of nurses toward patients from culturally different backgrounds utilizing the Cultural Fitness Survey (CFS). Data was collected from subjects (N = 274) randomly selected from a pool of registered nurses employed in acute care hospitals in an unidentified urban Midwestern county. The geographic parameter was chosen because it is an area rich in cultural diversity. The ethnic makeup of the county was reported to be 63.7% White; 24.1% Black American ; 8.4% Hispanic; and 3.8% Asian American. The subjects of the study were randomly selected from a target population of 3,242 registered nurses. A sample of nurses employed in nine acute care hospitals was selected using the proportionate sampling of elements method: 20% of the nurses in each of the nine acute care hospitals were randomly selected for participation in the study. Sixty-one percent of the sample were graduates of associate degree in nursing (ADN) programs. The remaining participants included 16.9% who received bachelor's (BSN) degrees, and 21.6% who held diplomas. The study sought to answer questions about the level of basic knowledge that nurses have

about culturally different patients and the attitudes of nurses toward those patients. Section 1 of the CFS dealt with knowledge of cultural diversity, including questions about culturally specific diseases and symptoms, values, and issues related to specific cultural groups. Section 2 of the CFS was the Cultural Attitude Scale developed by Bonaparte (1979) which measured their attitudes toward culturally different patients. Section 3 consisted of questions designed to collect demographic data. Using repeated measures MANOVA, multiple regression, and one-way ANOVAs, Rooda found that there were significant dissimilarities in nurses' knowledge of different cultural groups. Knowledge about Asian-American cultural content was significantly higher than for the Blacks and Hispanics. The mean for BSN graduates was significantly lower than the means for ADN and diploma graduates on knowledge of Black cultural content. This may have been threatened by the weighting of more diploma and ADN graduates. It was also found that nurses who participated in the study were most biased toward Hispanic patients and least biased toward Blacks. ADN graduates tended to be less biased toward Hispanics than non-ADN graduates.

Napholz (1999) examined self-reported cultural competency skills of second-semester junior-level nursing students toward clients from culturally diverse backgrounds. The purpose of the study was to determine if a cultural sensitivity intervention by an identified expert in cultural nursing facilitated greater self-perceived cultural competency skills when compared with the traditional method of incorporating cultural diversity into a clinical course. The sample consisted of students from two campuses of a university in an

urban Midwestern county and was obtained through convenience sampling. The traditional group (Treatment Group 1) consisted of 49 participants from six clinical groups. They received the standard or traditional treatment. The innovative treatment group (Treatment Group 2) consisted of 17 participants from two clinical groups. Both clinical experiences occurred in the same facility. Demographic information about the sample was not reported The Ethnic Competency Skills Assessment (ECSA), a self-report instrument, was used to measure self-perceived cultural competency skills when providing nursing care with culturally different clients. This is a 23-item Likert-type questionnaire with five response options ranging from never to always. The coefficient alpha was .9444 on the pretest. The instrument included such items as, "Am able to objectify and make use of my own culture/ethnicity and professional culture (nursing) which may be different than the client's own culture and ethnicity." The ECSA was administered prior to attending the clinical experience. Both groups received the traditional approach which included (a) completion of a cultural self-assessment exercise, (b) incorporation of sociocultural course objective concepts into weekly anecdotal records, (c) documentation of culturally sensitive care in charting and care plan formulation, and (d) demonstration of an understanding of the cultural uniqueness. Treatment Group 2 received three 2-hour onsite consultations from an expert in cultural nursing, in addition to the traditional approach to incorporation of cultural diversity into the course by regular course faculty. The consultant was a bachelor's prepared Black female nurse with 10 years experience in teaching practicum nursing students and providing health care services to an ethnically diverse population. In

addition she had research involvement with Black women. Three onsite consultations included collaboration with students in a group setting during clinical time and postconference. The collaborations were conducted to: (a) discuss openly racial and ethnic differences, (b) adapt to the clients' interactive style and language, and (c) apply change strategies consistent with the clients' needs and problems, degree of acculturation, and motivation for change. The consultant also helped students develop culturally relevant care plans. One-way ANOVAs were used to determine if mean attitude scores were higher among the group who received the onsite consultations. In examining pretest and posttest scores, it was found that posttest scores for both groups were higher than pretest scores. The posttest scores of Treatment Group 2 increased much higher than the posttest scores of Treatment Group 1 indicating that the treatment had an effect. Students who experienced the onsite consultations by the expert in cultural nursing perceived greater cultural competency skills than students who experienced cultural diversity in a clinical course. It is interesting to note that both groups had high mean scores for the pretest. Nursing students with no cultural diversity education evaluated their cultural competence at an unexpected level. Napholz (1999) identifies several possible threats to the internal validity of her study including nonequivalent groups, history, maturation, and socially acceptable answers. She also suggested a possible Hawthorne effect in the study. Treatment Group 1 had 49 students taking the pretest and 40 taking the posttest, which represented an attrition of 18.36 percent. Treatment Group 2 had 16 students taking the pretest and 17 scores in the posttest (Napholz, 1999).

Related Concept: Preceptorship

Preceptorship is a concept related to model competence. Preceptorship in nursing is an intense, one-on-one, reality-based experience in which learning experiences are coordinated and supervised by an experienced staff nurse. During the preceptorship experience the new nurse forms a relationship with a precepting nurse and is exposed to her occupational identity through dialogue, observation, and role modeling (Goldenberg, Iwasiv, & MacMaster, 1997). Role modeling is considered the most important aspect of preceptorship. Teaching and learner supervision were ranked second and third (Coates & Gormley, 1997). Preceptorships provide opportunities for nursing students or new nurses to perform nursing skills and to increase their self-efficacy in activities they will perform as practicing nurses.

Related Concept: Open-Closed Mindedness

Individuals who report high cultural self-efficacy because they view themselves as culturally confident may actually be "open-minded" without possessing knowledge about a specific culture. Open-closed mindedness is defined as, "The extent to which a person can receive, evaluate, and act on relevant information received from the outside on its own merits, unencumbered by irrelevant factors in the situation arising from within the person or from the outside" (Bonaparte, 1979, p. 168). The concept of open-closed mindedness is based on dogmatism which is synonymous with closed mindedness. Dogmatism is a characteristic related to the individual's organization of beliefs. A person's belief system consists of all the conscious and unconscious beliefs a person accepts as true about his

world at any given time. A closed belief-disbelief system is a defense mechanism against anxieties and threats to the self. Individuals with dogmatic personality patterns are characterized as low in ego strength, frustrated by changeable conditions, tense, impatient, timid, and tended to be cautious and compromising regarding new ideas (Bonaparte, 1979).

An individual's belief system develops out of parental and group influences and innate personality characteristics and is manifested within the limits set by culture. A person organizes the social world in terms of how congruent or incongruent others' belief systems are to one's own belief system. Early experiences about the social environment help to establish basic predispositions toward one' own group and toward other groups (Bonaparte, 1979).

Open-closed mindedness has been used to postulate a preference for members of other groups based on the degree of similarity or congruence of the belief system. Clients from different cultural or ethnic groups who were perceived as having health-care values, beliefs, and practices which differ from those of the health-care providers were thought to be more likely to elicit negative attitudes. The client who makes use of cultural health beliefs and practices in the health care setting tends to be treated differently. The closed-minded nurse does not acknowledge cultural health behaviors and perceives them as anxiety producing and threatening. Younger nurses tend to be more ego defensive than older nurses. Open-mindedness about cross-cultural appreciation increases with experience (Bonaparte, 1979).

Perceived Cultural Self-efficacy

In an effort to examine the cultural confidence of nurses, perceived cultural self-efficacy was introduced by Bernal and Froman in their development of the CSES (1987). With increased emphasis on home care of the sick client and major increases in ethnic groups such as Hispanics, Blacks and Southeast Asians, there was a concern that nurses are being asked to take care of these clients in the community without being adequately prepared. The concept of self-efficacy is becoming increasingly important as a means of predicting human behavior. It is a useful way to examine the link between how people think about a particular task and the way they ultimately behave or accomplish that task. Bandura (1977) explained that self-efficacy is a person's sense of confidence that a particular behavior can be carried out. Self-efficacy was selected as the measure of nurses' confidence in transcultural nursing, and a self-efficacy scale was constructed by these researchers (Bernal & Froman, 1987).

Research Studies: Perceived Cultural Self-efficacy

Bernal and Froman (1987) describe the cultural self-efficacy of community health nurses (N = 190) using a 5 point Likert-type scale to determine their degree of confidence in caring for three distinct populations (Blacks, Puerto Ricans and Southeast Asians). The sample consisted of visiting nurses, health department nurses, school nurses and occupational nurses in Connecticut. Possible self-efficacy ratings ranged from a rating of one for "Very little confidence" to a rating of five for "Quite a lot of confidence." The highest confidence scores were reported for caring for the Black population. Low scores

were observed for knowledge of health beliefs and practices as well as beliefs about respect, authority and modesty. At no time did ratings reach even moderate levels (4 on the scale) of confidence on any of the self-efficacy scale items. Weaknesses in caring for these three cultural groups went across all nurses' educational and demographic variables. Education, age, and years of practicing nursing offered no significant predictive worth. Considerable data was missing for the educational background category and the researchers could only speculate on the explanation for this. It was suggested that nurses may be sensitive about their educational preparation for community health nursing and avoid disclosure of that information.

Kulwicki & Boloink (1996) examined the level of comfort of graduating baccalaureate nursing students in providing transcultural nursing care to clients from five diverse cultural backgrounds. The sample consisted of students (N = 71) from a school of nursing located in the metropolitan area of Detroit. The CSES developed by Bernal & Froman (1987) was used to measure the confidence level of the students. The instrument was adapted to determine the level of self confidence of graduating baccalaureate students in providing transcultural nursing care to the maternal-child client population. Reliability of the adapted instrument was high (alpha = .97). The questionnaire included two variables found in the original instrument. These were knowledge of cultural patterns of the five racial/ethnic groups and confidence in students' skills in providing cross-cultural care. Confidence in performing nursing activities was measured by questions: how confident nurses were in their ability to perform an admission assessment, explaining

procedures, teaching about medications, initiating a referral and evaluating discharge teaching in a maternal-child population. Mean ratings indicated little or no confidence in caring for the five ethnic groups in Michigan. The overall mean cultural self-efficacy rating for knowledge of cultural patterns and skills in performing transcultural nursing activities was 2.6. A mean rating of "4" would have been considered to be a moderate degree of confidence. Students felt significantly more confident in caring for Native Americans than for Asian/Pacific Islanders. There was a significant difference between the overall mean score for ethnic groups (M = 2.5) and the overall mean for nursing skills (M = 3.3) (Kulwicki & Boloink,1996).

Jeffreys & Smodlaka (1998) conducted a study to validate the Transcultural Self-efficacy Tool (TSET) by identifying (a) the presence and growth in transcultural self-efficacy (TSE) perceptions over time, and (b) select demographic variables influencing differences in TSE percepts among student groups. They defined "Transcultural self-efficacy" as "perceived self-efficacy (i.e. confidence) for performing or learning transcultural nursing skills" (p. 222). The TSET was designed as a diagnostic tool to measure and evaluate students' self-efficacy perceptions for performing general transcultural nursing skills among diverse client populations. Transcultural nursing skill items were included under three subscales: cognitive, practical, and affective. Respondents were asked to rate their level of confidence using a 10-point scale, with one anchor labeled 1 (not confident) and the other anchor labeled 10 (totally confident). Content validity was established by a six-member expert panel review, consisting of

doctorally prepared nurses certified in transcultural nursing. The alpha coefficients for this study demonstrated high internal consistency: .98 (total TSET), .95 (Cognitive), .97 (Practical), and .96 (Affective).

The TSET was administered to a purposive sample of 566 culturally diverse students enrolled as first-semester students or fourth-semester students in five associate degree nursing programs within a northeastern public university. Approximately 67% were enrolled in a first clinical nursing course, and 33% were enrolled in a fourth-semester clinical nursing course; 82% were female, and 18% were male. Selected age categories ranged from younger than age 25 to older than age 55, with 45% between ages 25 and 34. Race/ethnicity was identified as 1% Alaskan Native/American Indian, 13% Asian/Pacific Islander, 6% Puerto Rican, 5% other Hispanic, 38% Black, 28% White, and 9% Other. Only 70% reported English as primary language and 40% reported incomes below $20,000. Nearly half (45%) reported previous health care experience. The age, ethnicity, gender, language, income, and health care experience profile was reported to be approximately the same among novice and advanced student groups (Jeffreys & Smodlaka, 1998).

Jeffreys and Smodlaka (1998) reported that faculty administered the 83-item TSET during a class session within the first 3 weeks of the semester. To explore the presence and growth in student TSE perceptions over time, TSET scores (means) and t-test values were calculated for the first-semester and fourth-semester students. Results indicated that means were higher for fourth-semester students than for first-semester students. For both

groups, means were highest on the Affective Subscale and lowest on the Cognitive Subscale. Significant differences between the two student groups were found for the Cognitive Subscale (t = -2.20; p = .03) and for the Practical Subscale (t = -2.38; p = .02). Statistically significant student group differences were not found between TSET scores on the Affective Subscale (t = -1.897; p = .06). A multiple regression method was used to explore the impact of demographic variables on the TSE among student subgroups; the TSET was the dependent variable. Previous health care experience (β = .18; p = .008) was the statistically significant contributor in predicting Cognitive TSET scores. Semester was the sole statistically significant contributor for the Practical Subscale (β = .20; p = .005) and the Affective Subscale (β = .21; p = .0002). Gender, age, ethnicity, language, and income were not significant predictors on any of the subscales. Overall, the combined affect of demographic variable measures accounted for the 7% of the explained variance in Cognitive Subscale TSET scores and 8% of the explained variance in Affective Subscale TSET scores ($p < .05$).

Research Studies: Cross-cultural Experience, Cultural Diversity Education and Perceived Cultural Self-efficacy

The following studies represent previous exploration of the relationships of cross-cultural experience, cultural diversity education and perceived cultural self-efficacy. Cross-cultural experience was evidenced by self-report or demonstrated exposure to individuals from diverse cultures. Performance feedback in cultural diversity education was not investigated.

Bernal & Froman (1993) again conducted research in 1988 by collecting data to examine cross-cultural self-efficacy of nurses working in official health agencies, including health departments. This extended the work on the CSES by analyzing responses from a heterogeneous sample of community health nurses representing 11 states (N = 206). The purpose of the research was to determine the factorial validity of the then 30-item CSES and identify relationships between selected demographic characteristics of nurses and CSES responses. A modified cluster sampling technique with a cross-sectional survey design was used to obtain data. Ninety-one percent of the respondents reported working with ethnic groups. The majority of the sample, 66%, held a bachelors degree in nursing and 73% identified themselves as White while the remaining 27% identified with one of eight different racial/ethnic categories. The average ratings across items related to knowledge of cultural patterns for the three groups (Blacks, Latinos and Southeast Asians) and their respective standard variations were comparable to the results obtained in the 1987 study (Bernal & Froman, 1987). Average item ratings were highest for Blacks (3.08), followed by Latinos (2.67), and Southeast Asians (2.27). Just under one third of response variation on General Cultural Skills was possible using two variables, ethnic/racial status of the respondent and the number of courses taken related to cultural diversity. The number of different cultural groups carried in a subject's caseload showed a significant positive relationship with efficacy. Black, Latino, and Asian nurses each reported the strongest efficacy for working with their own cultural groups, which relates to direct task experience. Regression analyses on the Latino cultural self-efficacy and

Southeast Asian cultural self-efficacy factors showed that the number of courses taken related to cultural diversity had a significant positive relationship with efficacy. Extent of cross-cultural exposure and years as a nurse were also positively related to Latino cultural self-efficacy (Bernal & Froman, 1993).

Williamson, et al. (1996) used Bernal & Froman's CSES along with anecdotal evidence to examine students' personal assessments of their confidence in their knowledge of and ability to care for ethnic minority clients. The project took place over 2 academic years. At beginning of the two fall semesters, senior students were assigned readings and audiovisual materials on cultures and cultural assessment prior to presentations by Hispanic and Southeast Asian speakers. Students were also exposed to 3 clinical experiences. Two consisted of 1 day per week in a community health setting and 1 day per week in a community psychiatric setting for half the semester. The remaining half of the semester included the 3rd clinical experience of working 2 days per week in a medical/surgical setting. Most of the student contacts with Hispanic or Southeast Asian clients occurred in two local visiting nursing agencies and one family health center with the major element being home visits. The students had opportunities to consult with primary nurses, Hispanic case managers, and Southeast Asian individuals versed in cultural issues. The Spring Semester included the development of audiovisual materials for presentations at various health and community centers and health promotion/disease prevention activities with Hispanic clients, Southeast Asian clients, or both. The CSES (Bernal & Froman, 1993) was administered to students three times (i.e., beginning,

middle, and end of semester) during the fall semester of their senior year. The sample consisted of 20 in the first fall class and 36 in the second fall class. These were the students who completed the 16 items in the second section of the CSES specific to ethnic groups for all three time periods. The subscores for the two different classes were not statistically different and the data for the 2 years were combined (N = 56). The age range of the students was 20 to 56 years (M = 25.7, SD = 7.8) and all but one identified their ethnic background as White. This student identified as Hispanic. Five of the students had lived outside of the United States at one time, and 2 of these were raised outside the U.S. Five students indicated that they spoke a language in addition to English. From a listing of ethnic groups, 33 students (59%) reported that they had worked previously with individuals from one or more of these groups. The average confidence scores for each of the subscales increased from the beginning of the semester to midsemester and again by the end of the semester. Due to missing data and relatively lower Cronbach's alpha coefficients on the first section, further analyses focused on the second and third sections of the CSES. The highest confidence subscore by ethnic group at the beginning of the semester was for Blacks, and this was the group with which the largest number of students had previous work experience. Confidence subscores also confirmed students reports of having more work experience with Puerto Ricans than with Southeast Asians. A repeated measures analysis of variance within each time period for the students' cultural pattern subscores for the three ethnic groups showed statistically significant differences at $p<.01$ ($df = 2, 53$). Repeated measures analysis of variance conducted on the cultural patterns

and transcultural skills subscores found the differences across time to be statistically significant at $p<.001$ ($df = 2, 53$). Post hoc paired t tests conducted on cultural pattern subscores within each time period revealed significant differences ($p<.01$, $df = 55$) for each contrast, except for midsemester subscores for Black and Hispanic groups and end-of-semester ratings for these same two groups. The researchers attributed the initial difference between ratings for Black and Hispanic groups to the clinical experiences students had with Hispanic clients during the semester. These experiences may have increased students' confidence as demonstrated in the subscores on the CSES (Williamson, et al., 1996).

Alpers & Zoucha (1996) compared cultural competence and cultural confidence of senior nursing students in an unidentified private southern university using the CSES (Bernal & Froman, 1987). This study employed survey methodology. The samples consisted of senior nursing students enrolled during Spring and Fall semesters in a required Community Health Nursing course. One group received cultural diversity nursing content in their junior level Psycho-Social Nursing course (N = 32) and one group had not received this content (N = 31). The group that did not receive the cultural diversity content reported greater confidence/competence in distinguishing between inter- and intracultural diversity. In addition, this group also felt more confidence/competence in entering an ethnically distinct community, and understanding Asian Folk Health Practices than did the group who had received class content on culturalism. The group that received class content including cultural assessment, health care practices of African-

American, Hispanic-American and Asian ethnic groups, racism and classism and self-reflection self-reported greater confidence and competence in understanding African-Americans' Economic Style of Living, African-Americans' Employment Patterns, and Hispanics' Beliefs Toward Modesty. No other statistically significant differences were noted. The researchers noted that following the self assessment with the Cultural Self Efficacy Scale a two hour class was presented on the conceptual foundations of transcultural nursing. The researchers pointed out that the Spring Community Health Class, which had no previous content in culturalism, but who had self-identified greater confidence and competence in providing culturally appropriate care, appeared to have difficulty in understanding the transcultural nursing concepts. They required numerous examples of the concepts, were argumentative with the expert speaker and were unable to apply the concepts in group activities. This exercise suggests a true lack of cultural knowledge on their part and suggests their cultural confidence and competence may be more reflective of a false cultural awareness. Additionally, this group indicated greater confidence in providing care to the Asian community. Again, this finding was of interest when noting that this group had participated in ten weeks of home visits with African-American and Hispanic families, but the group had no experience with visiting Asian families. The researchers suggested that it may be concluded that the group feels more confidence and competence with the ethnic group with which it had least contact. Conversely, the Fall Community Health class who had received previous transcultural nursing content and had also experienced ten weeks of home visiting with African-

American and Hispanic families generally felt more confidence and competence in providing care to these groups. The researches concluded that this supports the idea that didactic combined with clinical experiences impacts confidence and competence. Lower scores in the other areas of the survey suggest that this exposure to cultural content helped them to realize that they do not know enough about these various groups (Alpers & Zoucha, 1996).

In an effort to analyze data for possible patterns and correlations among the scales and variables of the CSES (Bernal & Froman, 1987) and an adapted version of the CAS (CAS-M) (Rooda, 1993), Smith (1998b) conducted a pilot study (N = 51) of southern-based hospital-employed RNs. An additional purpose was to develop reliability and validity data on each of the scales. This study utilized a non-experimental descriptive research design with survey methodology. Sample demographics included 20% non-White, 80% White, 37% were 41-50 years of age, and 94% were female. Approximately 49% reported an Associate Degree as their basic educational level and 25% had 21-25 years in nursing. Respondents reported that 21.6% cared for a client base that was 41-50% culturally different from their own. Fifty-three percent had diversity content in their basic nursing programs and 61% had never had a diversity continuing education workshop or inservice. For this sample, the reliability analysis for the CSES was .9778. The reliability data for the CAS-M was .6412. Using Canonical Correlation, Smith found that all but one of the variables (cultural health beliefs) correlated above.3 with their respective canonical variate. She also found, however, that variables of cultural self-efficacy have

greater adequacy (stronger) than variables of attitude and concluded that there seemed to be a stronger bond for the self-efficacy variables within the results of her sample. Cultural self-efficacy toward Asian, Black, and Hispanic clients and self-efficacy regarding nursing skills when caring for diverse clients related to cultural attitudes. Nursing care, cultural health beliefs, and cultural health attitudes related to attitudes toward care of diverse clients. Both sets of variables relate to each other as qualities of culturally competent nursing care. Canonical correlations were only significant for the construct scores within the CSES and CAS-M scales. Stepwise regression analysis (demographic variables) and model fitting processes were completed. Smith concluded that diversity-related continuing education programs, cultural heritage and background, percent of clients cared for with culturally different backgrounds seemed to contribute to CSES total scores. Step-wise multiple regression analysis with all demographic variables, as they related to total CAS-M scores demonstrated participants' type of basic nursing education as the only variable. A one-way ANOVA for total attitude scores on the CAS-M and basic nursing education was non-significant (Smith, 1998b).

Summary

Culture is the transmitted values, beliefs, and norms of a particular group that influence one's thinking and actions. Cultural competence is a complex integration of knowledge, attitudes, and skills that enhances cross-cultural communication and effective interactions with others. Health care that is culturally competent is dependent upon the

cultural knowledge and skills of the providers. The expectation in nursing is that the client has a right to expect consideration for their individuality when nursing care is provided.

Cultural self-efficacy has been studied as a means of predicting cultural competence in nursing. Sources of self-efficacy include enactive mastery, verbal persuasion, and vicarious experience. In this study, cross-cultural experiences, performance feedback in cultural diversity education and model competence were identified and explored as proposed sources of cultural self-efficacy.

The literature demonstrates the need for enhanced cultural diversity education in nursing with limited agreement as to what that content should include. How this should be taught and to what extent seems to vary a great deal. Some argue that nurses don't "get it," that nursing doesn't acknowledge that cultural diversity is viewed as unimportant by many educators. It is clear that nurses have an ethical responsibility to become more culturally aware and knowledgeable. National nursing organizations are responsive to increasing diversity in American society as they offer curriculum designs for promoting cultural competence in students of nursing. Empirical studies are surprising and somewhat inconsistent with expected outcomes. Community nurses are not even moderately confident in their care of individuals from diverse cultures. Missing data about educational preparation in this group might suggest that they are educationally prepared below their level of practice. ADNs in the acute care setting demonstrate more knowledge about Blacks than BSNs and less bias toward Hispanics than BSNs. The expectation would be that the BSN with a broader knowledge base and a background of liberal arts courses

would demonstrate greater knowledge and less bias. Nursing students report greater confidence when they've had no cultural content or exposure to certain cultural groups. These findings would support Bandura's explanation of faulty assessment of self-efficacy. Exaggeration of abilities may come from inadequate knowledge of task demands or of how the social system works. Nursing students who have had work experience with minority clients but have had no cultural diversity education report higher multicultural competency.

All of the empirical studies pointed out the limitation of self-reporting measures. The participants may have selected responses that they thought were socially desirable rather than being entirely honest. Despite this limitation, the studies suggest a possible relationship between a moderate level of self-reported cultural competence and personal experience with individuals from other cultures and cultural diversity education. Based on Self-efficacy theory, nurses will be expected to develop an increased sense of self-confidence in caring for culturally diverse clients if they have the opportunity to work with these clients, are given praise and encouragement for culturally competent care, and have competent transcultural nursing role models.

CHAPTER 3

METHOD

This study incorporated a cross-sectional, nonexperimental, survey design to test a model and determine if there is a relationship in cross-cultural competence, performance feedback, model competence and perceived cultural self-efficacy of nursing students. The advantages of this type of study include that the data collection process is systematic and well-defined. Using questionnaires allows the researcher to generate group-level summary statistics, and the results are generalizable to the groups represented by the individuals included in the study. The cross-sectional, survey design in this study also had the advantage of being convenient and provided the opportunity for rapid turn-around in data collection. In addition, this study was designed to be nonexperimental.

The aim of model testing is to identify those concepts which best or optimally explain a dependent or outcome phenomena of interest (Ferketich & Verran, 1984). In this study, multiple regression was used for the exploratory test of a model based on the construct of self-efficacy put forth by Bandura (1997). The researcher has tested this model in a population of nursing students by attempting to isolate the separate contributions to the dependent variable (perceived cultural self-efficacy) made by a set of proposed interrelated predictor variables (cross-cultural experiences, performance feedback, and model competence) in a recursive linear model.

The model (figure 3) was tested in one stage. Perceived cultural self-efficacy was regressed on cross-cultural experience, performance feedback of cultural diversity education, and model competence. Straight unidirectional arrows are used to depict a directional relationship between variables.

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3$$

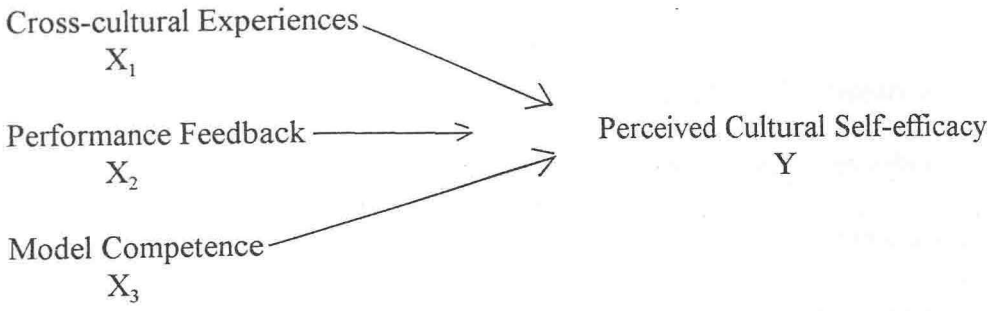

Figure 3. Regression of cross-cultural experiences, performance feedback, and model competence on perceived cultural self-efficacy.

Setting

The nonrandom convenience sample was drawn from eight universities and community colleges in different rural and metropolitan areas in a Midwest state. Two of the eight schools, an associate degree program and a baccalaureate degree program, each had 2 campuses. The populations of the towns and cities where the ten programs were located ranged from 1,670 to 506, 132. No attempt was made to systematically stratify

the sample population other than having approximately equal numbers of associate and baccalaureate students.

Population and Sample

Participants in the study were recruited from nursing students enrolled in associate and baccalaureate nursing programs at community colleges and state universities. A non-random, convenience sample was drawn from these ten campus sites. The investigator solicited students by visiting their classrooms, explaining the purpose of the study, and inviting them to participate.

The sample size was determined by using power analysis. The researcher expected a small effect size among the variables, and therefore selected an effect size of .20. A power of .80 and an alpha of .05 were selected as appropriate for this study. Four variables were included in the model, three independent and 1 dependent variable. Based on Cohen's formulas (1987) for calculating sample size, the resulting suggested sample size was 48.

Tabachnick & Fidell (1989) recommend 20 times more cases than independent variables for standard multiple or hierarchical regression. In this study there were 3 independent variables. According to this guideline, a minimum of 60 cases should be used.

Because multivariate analysis is more trustworthy when N = 200 or more, Northam & Marshall's (1995) power tables for multivariate analysis were utilized to guard against too small of a sample. Based on the same power of .80, an alpha of .05, and

3 independent variables, the suggested sample size was 265. The actual sample in the study was 351. When completing the MES, students were asked if they had a role model. If they identified having a role model in nursing, they were asked to continue to complete the scale. Students who did not have a role model did not complete the scale. The total number of respondents completing the MES was 318. This reduced sample was used to test the hypothesis: The independent variables of cross-cultural experience, performance feedback in cultural diversity education, and model competence will explain a significant portion of the variance in a model of perceived cultural self-efficacy.

Protection of Human Subjects

The prospectus was approved by the researcher's dissertation committee in the College of Nursing (Appendix A) and was also approved by the Graduate School (Appendix B). The Human Subjects Review Committee at Texas Woman's University granted permission to conduct a Level 1 study (Appendix C). The risk of the study was seen as minimal and included possible slight embarrassment due to the perceived lack of knowledge, practice, or instructional expectations as reflected by the survey. All respondents were 18 years of age or older and all responses were anonymous. Copies of the school approvals (Appendix D) were filed with the Human Subjects Review Committee. The cover letter introducing the dissertation study (Appendix E) assured respondents of anonymity and their right to refuse to participate. For the anonymous questionnaires, the following statement was placed at the top of each questionnaire in lieu

of an informed consent form: *The return of your completed questionnaire constitutes your informed consent to act as a participant in this research.*

Instruments

Five instruments were used to collect data for this study: The Participant Profile, the Performance Feedback Scale (PFS), the Model Evaluation Scale (MES), the Cultural Self-efficacy Scale (CSES), and the Visual Analogue Cultural Self-efficacy Scale (VACSES). Cross-cultural experiences were measured by a section of the Participant Profile called Cross-Cultural Experience. The Participant Profile also included information for describing the sample. Performance feedback was measured by an instrument developed by the researcher called the PFS. Model competence was measured by the Model Evaluation Scale (MES), an instrument developed by the researcher that was based on the content of the PFS. Perceived cultural self-efficacy of the student nurses was measured by the CSES (Bernal & Froman, 1987). The Visual Analogue Cultural Self-efficacy Scale (VACSES) was developed by the researcher to evaluate concurrent validity of the Cultural Self-efficacy Scale (CSES).

The Participant Profile

The Participant Profile (Appendix F) was used to collect data about the samples. Demographic variables for students included cultural heritage, highest level of education attained, class standing in the nursing program, nursing licensure (if student was currently licensed as a registered nurse or practical nurse), years of experience as a licensed nurse, and cultural diversity education. Questions for students regarding cross-cultural

experience included years lived outside the United States, foreign languages spoken, percentage of cross-cultural interactions in their daily life and percentage of patients for whom they provided care whose racial/ethnic backgrounds were different from their own.

The Performance Feedback Scale (PFS)

The PFS (Appendix G) is a 17-item instrument developed by the researcher to assess students' perceptions of positive evaluative feedback of cultural diversity education in their nursing programs. Students were asked to report their level of agreement on a 5-point Likert scale. Statements included exploration of beliefs and values, knowledge of cultural patterns and skills, culturological assessments and nursing care provided. The questionnaire also included statements about cultural sensitivity, integrating beliefs and values of others, and appropriate communication. The instrument is specific to nursing and is unlikely to be adapted to other groups. Reliability for the PFS was estimated in the pilot study with BSN students. The internal consistency estimate (Cronbach's alpha) of the 17-item scale was .94.

Evaluation and review from a panel of five nursing faculty with extensive transcultural experiences supported the construct and content validity of the PFS. Construct validity was supported by the panel's assessment that the instrument contained sufficient content to capture the latent concept. They responded with helpful suggestions for re-wording items, deleting or adding items. Based on their feedback the PFS evolved from a 9-item questionnaire to a 17-item questionnaire.

The Model Evaluation Scale (MES)

The MES (Appendix H) is a 17-item instrument developed by the researcher that is based on the same item content found in the PFS. The MES was used to assess students' perceptions of the cultural competence of their nursing role models. Students were first asked if they had a nursing role model. If they responded "yes" to the question, they were asked to report their level of agreement on a 5-point Likert scale. Statements include the same content found in the PFS including exploration of demonstrated beliefs and values, knowledge of cultural patterns and skills, culturological assessments and nursing care provided. The questionnaire also includes statements about cultural sensitivity, integrating beliefs and values of others, and appropriate communication.

The Cultural Self-efficacy Scale (CSES)

The CSES (Bernal & Froman, 1987) (Appendix I) was originally developed in response to a need for a reliable and valid way to measure the perceived sense of self-efficacy of community health nurses caring for culturally diverse clients. The CSES is based on Bandura's construct of self-efficacy (1977). Bandura defines an efficacy expectation "as the conviction that one can successfully execute the behavior required to produce outcomes" (1977, p. 193). Individuals who rate themselves high on self-efficacy have a "can do" perception about their ability to perform a specific task. Individuals with high self-efficacy perception are more likely to perform a given task, and persist in the performance of that task until mastery is achieved. According to Bandura, self-efficacy ratings are very task specific perception related to each task. The CSES measures the

individual nurse's confidence in his/her knowledge and skill to deliver culturally appropriate care to three specific ethnic/racial groups.

Cultural self-efficacy has become important as a means of predicting cultural competency. The original study by Bernal & Froman (1987) focused on Blacks, Latino-Hispanics, and South East Asians. The authors emphasize that the instrument can be adapted to other minority groups. This study focused on Blacks/African Americans, Latino/Hispanics, and Native Americans.

The CSES (Bernal & Froman, 1987) is a 26 item Likert scale consisting of three categories: (a) knowledge of general transcultural concepts, (b) knowledge of specific cultural patterns, and (c) skill specific transcultural nursing tasks. The authors explain that "High" ratings may be interpreted to mean that nurses have a high level of confidence in their ability to deliver culturally appropriate care to the three ethnic groups indicated and would be likely to engage in delivering care to these populations. "Low" ratings may be interpreted to mean that nurses do not have confidence in their ability to deliver culturally appropriate care and thus may avoid working with these ethnic groups.

The items on the scale have been developed from transcultural nursing and anthropology literature. Nurses' community health experience with Puerto Rican, Black and Hispanic clients also provided a basis for the questions. A panel of five community health nurses working with an inner city population through a visiting nurse association (VNA) also reviewed the items for clarity and relevance. Items are rated on a scale of 1-5. One represents "little confidence" and 5 represents "quite a lot of confidence." The

general concept and skill items are rated once each and the cultural pattern items are rated three times, once for each of the three groups identified on the scale.

Reliability for the CSES was assessed using data from two separate samples: (a) 190 Community health nurses in Connecticut and (b) 206 community health nurses from various regions of the USA. The data were analyzed to estimate an alpha internal consistency as a measure of scale cohesiveness. Alpha internal consistency estimates for the entire scale were found to be .97 for both sets of data.

Validity was evaluated by subjecting data from the national sample to a principal components analysis with a varimax rotation. The criterion of .40 was established as cutoff for loading of any item contributing to any factor. Four factors which explained 90% of the scale variance were identified. Three distinct factors were identified for confidence in Black, Latino, and South East Asian cultural patterns respectively. One general factor including the ten general items was also identified. Alpha estimates for the four factors ranged from .89-.96. The CSES has shown sensitivity to variations in perceived level of self-efficacy of community health nurses working in a variety of settings from VNA to local health departments. Construct validity is supported by higher ratings of efficacy being indicated from nurses having had experience working with each of the specific ethnic/racial group addressed on the scale. Examples of items on the scale include distinguishing between ethnocentrism and discrimination, confidence in knowledge of cultural patterns within the Black/African-American group in regard to child care practices, and confidence in specific nursing skills such as using an interpreter.

Visual Analogue Cultural Self-efficacy Scale (VACSES)

The Visual Analogue Cultural Self-efficacy Scale (VACSES) (Appendix J) was developed by the researcher to assess concurrent validity of the CSES. The Visual Analogue Scale has traditionally been used as a horizontally oriented scale without markings. The use of gradations on the visual analogue scale reduces its sensitivity (Gift, 1989). Respondents were asked to respond to questions that represent the same items or subscale items on the CSES. Directions for how to fill out the questionnaire included an example of how to mark the VACSES. Each of the eleven (11) items included a horizontal visual analogue scale of 100 mm in length with anchors at each end representing the extremes of the questions under study, "little confidence" and "quite a lot of confidence." The first four items were compared to four subscales on the CSES for concurrent validity. The remaining seven items were compared with the corresponding items on the CSES.

Validity

Internal validity asks if what has taken place is due to the variables the researcher claims to be operating or can it be attributed to other variables. The more powerful the control of alternative explanations, the more internally valid is the study (Pedhazur & Schmelkin, 1991). The nonexperimental, cross-sectional survey research design of this study was a threat to internal validity due to the inability to manipulate the independent variables; the inability to assess change, stability or temporal order of variable, and the

inability to randomize. Other threats to internal validity included self-selection and social desirability. Students who have an interest in or biases associated with cultural diversity topics may have been more likely to agree to participate in the study. Those who did choose to answer the questionnaires may have given answers perceived to be more socially acceptable.

External validity refers to generalizability of findings to or across target populations, settings, and times (Pedhazur & Schmelkin, 1991). Findings of this study are only generalizable to other nursing students in Midwest universities and community colleges. The settings selected may be threats to external validity since the "culture" of nursing programs varies from program to program and could threaten generalizability.

Content validity is the representativeness or adequacy of the content–the substance of a measuring instrument. Nunnally & Bernstein (1994) describe it as sampling from a pool of required content which, when representative, permits the maximum generalizability of results. According to Kerlinger (1986) content validation consists in "judgement" of the representativeness of the items and should usually be done by "other" competent judges of the items. Content validity of the CSES was supported by review of the items for clarity and relevance by a panel of five community health nurses working in an inner city population. Content validity of the PFS and MES was supported through a review of the items by five nursing faculty with extensive transcultural experiences.

Construct validity addresses the psychological properties that can explain the individual differences in test scores or variance. According to Kerlinger (1986), factor

analysis is a powerful method of construct validation. It is a method for reducing a large number of measures to a smaller number called factors by discovering which ones go together (Kerlinger, 1986). Bernal & Froman (1993) evaluated construct validity of the CSES by subjecting data from a national sample of nurses to a principal components analysis with a Varimax rotation. Construct validity of the PFS and MES was also evaluated by subjecting sample data to a principal components analysis with Varimax rotation.

Concurrent validity of the CSES was supported by the development and use of the VACSES, which compared corresponding item and subscale scores with the CSES using visual analogue scales. Kerlinger (1986) explains that the higher the correlation between the two instruments, the better the validity. According to Nunnally & Bernstein (1994) another type of evidence for content validity is also obtained from correlating scores on different tests purporting to measure much the same thing.

Reliability

Reliability coefficient alphas were computed for the MES, PFS, CSES, and VACSES. The alpha coefficient is a measure of the internal consistency of an instrument and is based on the average correlation of items within a test (Nunnally & Bernstein, 1994). Items that correlate highly indicate measurement of a common attribute or concept. According to Nunnally and Bernstein (1994), one hopes for an alpha of .70, which is considered an acceptable estimate of reliability. For this study, all instruments were piloted to reduce the likelihood of measurement error by items that were not written

clearly or instructions that were difficult to understand. Nunnally & Bernstein (1994) explain that a major way to make tests more reliable is to make them longer. Content validity experts for the PFS suggested that items be added to better sample the domain, which also contributed to the reliability of the instrument.

Pilot Study

In May, 2000 a pilot study was conducted. A nonrandom convenience sample of 60 nursing students was drawn from a university in a southern metropolitan area with a population of over 3,000,000. Students were asked to participate in the pilot study and were not included in this dissertation study. Participants in the study were recruited from nursing students enrolled in two sections of a Multicultural Women's Health course during a summer semester. The director and instructors of the two class sections were previously contacted and granted permission for the study. The Human Subjects Review Committee at Texas Woman's University and the Human Subjects Review Committee for the pilot institution gave approval to conduct the study.

Sample size for the pilot study was determined by self-selection of the participants. Students were given a study packet which included a cover letter explaining the study, a consent form, a PFS, a CSES, and a VACSES. After a brief explanation of the nature and procedure of the study, the researcher asked for those wishing to participate to sign and submit the informed consent form while those who did not want to participate should return the packet to the researcher. As an incentive to participate, students were served cookies.

Data were collected in class before the course began. In Group 1, 28 students completed the pre-class survey and 32 students completed the pre-class survey in Group 2. One questionnaire from Group 2 was eliminated from the study because the respondent did not complete the instruments.

The total number of students reported their cultural heritage as Asian, 9 (15.0%); Black/African-American, 9 (15%); White, 32 (53.3%); Hispanic, 8 (13.3%); and Other, 2 (3.3%). Students in the Group 1 described their cultural heritage as Asian, 5 (17.9%); Black/African-American, 3 (10.7%); White, 17 (60.7%), Hispanic, 3 (10.7%); and Other, 0. Students in Group 2 described their cultural heritage as Asian, 4 (12.5%); Black/African-American, 6 (18.8%); White, 15 (46.9%); Hispanic, 5 (15.6%); and Other, 2 (6.3%).

All students reported an age range of 19-52 with a mean of 30.5 years. Group 1 reported an age range of 19-50 with a mean age of 27. Group 2 reported an age range of 21-52 with a mean age of 32.9.

In reporting education degrees earned, students reported that 43 (72.8%) had no degree and 16 (27.2%) had an associate degree. Group 1 indicated that 26 (92.9%) had no degree. Two students (7.1%) reported that they had associate degrees. It should be noted that the Participant Profile omitted the choice for the associate degree. Students in both groups elected to write in the margins if they had an associate degree. One student did not answer the "degree" question. Group 2 reported that 17 (54.8%) students did not have degrees and 14 (45.2%) wrote-in that they had associate degrees.

Students' class standings were reported as freshman, 1 (1.6%); sophomore, 2 (3.3%); junior, 22 (36.6%); and senior, 35 (58.3%). Class standings for students in Group 1 were reported as freshman, 1 (3.6%); sophomore, 0; junior, 16 (57.1%); and senior, 11 (39.3%). Students in Group 2 reported their class standings as freshman, 0; sophomore, 2 (6.3%); junior, 6 (18.8%); and senior, 24 (75.0%).

Licensure status was reported as unlicensed, 37 (61.6%); Licensed Practical Nurse, 0 (0.0%); and Registered Nurse, 23 (38.3%). Group 1 students reported unlicensed, 23 (82.1%); licensed practical nurse, 0; and registered nurse, 5 (17.9%). Over half of the students in Group 2 were licensed nurses with students reporting their licensure status as unlicensed, 14 (42.4%); licensed practical nurse, 0; and registered nurse, 18 (56.3%).

The 23 registered nurses reported a range of 1-30 years experience with a mean of 11.5 years. The five registered nurses in Group 1 reported 5 – 27 years of experience as licensed nurses with a mean of 13.8 years of experience. Group 2, which had a greater number of registered nurses enrolled, reported a total of 18 licensed nurses with a range of 1-30 years experience and a mean of 10.8 years.

When questioned about the number of years they have lived outside the United States, 40 (66.6%) reported that they had never lived outside the United States. Four students reported that they lived outside the United States for less than one year and 11 (18.3%) reported that they had lived outside the United States between 1 and 20 years. Two students reported that they had lived outside the United States for more than 40

years. Seventeen (60.7%) students in Group 1 reported that they had never lived outside the United States. Three (10.7%) students in the group reported that they had lived outside the United States less than a year and seven (28.8%) students reported that they had lived outside the United States between 1 and 20 years. One student reported living outside the United States for 49 years. Students in Group 2 reported that 23 (71.9%) had never lived outside the United States. One student (3.1%) reported living outside the United States for less than one year. Eight (24.8%) students reported 3 to 48 years of living outside the United States.

The majority (70.0%) of the students in both groups reported that there were no languages they could speak fluently. Forty-four percent of students in both groups identified one to four languages in which they could converse. Sixty-five percent identified one to five languages in which they knew limited content and 82% reported that they knew a minimal amount of one to five languages.

For percentage of the interactions in their daily life with persons of racial/ethnic cultures different from their own, students reported a range of 0-100% with a mean of 55.9%. Group 1 reported a range of 20-100% with a mean of 62.8%. Students in Group 2 reported a range of 0-100% and a mean of 49.9%.

Students reported that the estimated percentage of patients/clients for whom they provided care whose racial/ethnic backgrounds were different from their own was 0-100% with a mean of 63.1%. Students in Group 1 reported their estimated percentage of

patients/clients for whom they provided care was a range of 0-100% with a mean of 67.6%. Group 2 students reported a range of 2-100% with a mean of 59.2%.

Students reported a range of 0-8 non-nursing courses with a mean of 1.3. Group 1 reported a range of 0-8 non-nursing courses in cultural diversity with a mean of 1.1 courses. Students in Group 2 reported a range of 0-4 non-nursing courses with a mean of 1.4.

When asked how many nursing courses they had completed that had the word "culture," "race," or "minority" in the course name or course description, students reported a range of 0-8 courses with a mean of 1.2 courses. Group 1 reported a range of 0-7 nursing courses in cultural diversity with a mean of .8 courses. Students in Group 2 reported a range of 0-8 nursing courses with a mean of 1.6 nursing courses.

Students reported that 56.7% had not attended any conferences, seminars or field trips related to cultural diversity or different racial/ethnic cultures. Students in Group 1 reported that 64.3% had not attended any conferences, seminars or field trips. Responses ranged from 0-500 clock hours with the mean being 24.3 and the median .00. Students in Group 2 reported that 50% had no clock hours of attendance at conferences, seminars, or field trips. The range was 0-600 hours with a mean of 33.6 and a median of .50 clock hours. When outliers in both groups were substituted with pre-class group means, the range was 0-200 with a mean of 15.4.

Performance Feedback Scale (PFS)

Reliability with alpha internal consistency was .94 on the 17-item PFS in this study. Students in Group 1 reported their highest mean (4.2) for performance feedback about awareness of how cultural biases may influence care of a culturally diverse client and sensitivity to a client's cultural values. Their lowest mean (3.5) was for performance feedback about exploration of their own cultural heritage. Group 2 had their highest mean (3.9) for performance feedback on sensitivity to a client's cultural values and knowledge of how culture may influence a client's beliefs about disease and illness. The lowest mean (3.2) for Group 2 was for exploration of their own cultural heritage.

Cultural Self-efficacy Scale

Students were asked to rate their confidence levels regarding knowledge of cultural concepts, knowledge of cultural patterns within 3 different ethnic/racial groups, and confidence in specific nursing skills. In all cases "Very little confidence" was translated to a rating of 1; "Quite a lot of confidence," to a rating of 5. The reliability analysis of the CSES yielded an alpha of .96.

Means for Group 1 were equal to or higher than Group 2 in knowledge of cultural concepts: Distinguishing between inter and intra cultural diversity (Group 1 = 3.0, Group 2 = 3.0), Distinguishing between ethnocentrism and discrimination (Group1 = 3.8, Group 2 = 3.5), and Distinguishing between ethnicity and culture (Group 1 = 3.7, Group 2 = 3.5).

Group 2 reported greater means than Group 1 in all areas of the Cultural Self-efficacy Scale regarding knowledge of cultural patterns by ethnic background. This greater confidence was consistent for the three ethnic groups: Blacks/African-Americans (Group1 = 3.13, Group 2 = 3.42), Latinos/Hispanics (Group1 = 3.21, Group 2 = 3.56), and Native Americans (Group 1 = 2.09, Group 2 = 2.45). Both groups reported the highest level of confidence in their knowledge of cultural patterns in Latinos/Hispanics and the lowest level of confidence for Native Americans. In Group 1, the highest mean self-efficacy rating (3.6) was for types of social support in Latinos/Hispanics and in Group 2 for Latinos/Hispanics' beliefs toward modesty (4.3). The lowest reported mean self-efficacy rating in Latinos/Hispanics for Group 1 was for patterns of disease/illness (2.7). Confidence in knowledge about Latino/Hispanic utilization of traditional folk health practices was rated lowest (3.1) by Group 2.

In the category of using transcultural nursing skills, the mean scores for the 7 items were: using an interpreter (Group 1 = 3.3, Group 2 = 3.9), entering an ethnically distinct community (Group 1 = 3.0, Group 2 = 3.5), advocacy (Group 1 = 3.2, Group 2 = 4.0), performing a 24 hour diet review (Group 1 = 3.6, Group 2 = 3.6), participant observation (Group 1 = 3.5, Group 2 = 4.0), taking a history (Group 1 = 3.5, Group 2 = 3.8), and developing a geneogram (Group 1 = 3.9, Group 2 = 3.7). Group 1 reported the lowest confidence in entering an ethnically distinct community and the greatest confidence in developing a geneogram. Group 2 reported the lowest confidence in entering an

ethnically distinct community and the greatest reported confidence in advocacy and participant observation.

Correlation of the CSES and the VACSES

Kendall's Tau is the nonparametric measure of correlation used in this study because the sample size was small. The correlation of the means of the CSES and VACSES on knowledge of cultural concepts was .44 and significant at the .01 level (2-tailed). Confidence in knowledge of cultural patterns within the Black/African-American groups was significantly correlated (.81). The correlation of confidence in knowledge of cultural patterns within the Latino/Hispanic groups was significant (.63). The correlation of confidence in knowledge of cultural patterns within the Native American groups was .58 and significant . All correlations of confidence in specific nursing skills using the CSES and VACSES were significant at the .01 level (2-tailed).

Multiple Regression

For purposes of the pilot study, the number of cases were multiplied by cutting and pasting existing data in SPSS to create 278 respondents. This step then provided enough cases for the regression to run. Cross-cultural experience had a correlation with CSE of .24. The correlation of the PFS and the CSES was .20. As a result of the pilot study, the measure for model competence was judged to be inappropriate and resulted in the development of the MES as a different measure.

Data Collection

Nursing programs at four universities and four community colleges were contacted. After permission was granted by the directors of the nursing programs and/or institutional review boards at their schools, final approval was received from Texas Woman's University Human Subjects Review Committee. During lecture classes, an explanation was given about the purpose of the study and students were invited to participate. Students were told that they would be served complimentary food for their participation in the research study. Students completing the surveys in the morning were served muffins and juice. Students completing during the lunch hour were served pizza and sodas, and students completing surveys in the afternoon were served cookies and juice. Those wishing to participate were given a research study packet in a manilla envelope. Some instructors allowed time during class for completion of the surveys. For others, students had time after class to complete the surveys. The study packet included a cover letter explaining the study, a Participant Profile, a PFS, a MES, a CSES, and a VACSES. After reading the contents of the packet, students who did not want to participate were asked to return the packet to the researcher. Participants completed the questionnaires and placed them in the envelopes provided. The envelopes were then returned to a box for collection by the researcher. The instruments took approximately 20-25 minutes to complete.

All data were entered into my personal computer for analysis with SPSS Graduate Pack 8.0 for Windows (SPSS, 1997). Results were reported in aggregate data, eliminating the risk of exposure to individual students.

Treatment of Data

Level of Data

Participant Profile

The level of data on the Student Participant Profile, *demographic data*, is as follows: (a) cultural heritage in nominal, (b) age is interval, (c) educational degrees is ordinal and nominal (d) class standing is ordinal, (e) licensure status is nominal, (f) years of experience as a licensed nurse is ratio, (g) cross-cultural experience is ratio, and (h) cultural diversity education is ratio.

Performance Feedback Scale (PFS)

The responses selected for this scale describe an ordinal representation of the students' perceptions of the overall amount of positive feedback given in regard to cultural diversity content in nursing courses . An ordinal scale reflects only the relation "greater than," however sociobehavioral research considers that ordinal level data is not just "more than" or "less than." It also signifies differences that may not be expressed in equal interval units. Treating them as if they were ordinal level data in analysis could lead to the loss of valuable data (Pedhazur & Schmelkin, 1991). For purposes of this study the responses on the PFS were treated as interval level data.

Model Evaluation Scale

The level of data on the MES is ordinal and was treated as interval level data.

Cultural Self-efficacy Scale

The level of data on the CSES is ordinal. Responses ranging from "little confidence" to "quite a lot of confidence" were treated as interval level data.

Visual Analogue Cultural Self-efficacy Scale

The VACSES is based on a 100 mm line with anchors at each end. Although it is based on a measure of length that is determined with a ruler, this data was treated as interval level.

Treatment of Data

This section discusses methods used to analyze the data to satisfy the study purposes and test the relationships described in the research hypotheses. Each variable is calculated by using multiple regression analysis in which the endogenous variable is regressed on the variable prior to it in the model. The standardized or beta weight is the value that was used for this study. Three regressions were done in this study. Student perceived cultural self-efficacy was regressed on cross-cultural experience, model competence, and performance feedback.

Cross-cultural experience was operationalized as the sum of responses to seven questions regarding the number of years the respondent lived outside the United States, the number of foreign languages spoken, percentage of interactions with persons from a different cultural heritage and percentage of patients from a different cultural heritage for

whom care was provided. The degree of fluency of foreign languages was weighted and computed like a letter grade (4.0, 3.0, etc.) when calculating cumulative grade point average. Fluency was rated as three, conversant as two, minimal as one, and none as 0.

Performance feedback was operationalized as a mean score on the PFS as completed by nursing students. Model competence was operationalized as the mean score on the MES. The dependent variable of perceived cultural self-efficacy in nursing students was measured using a grand mean for all subscales of the CSES for nursing students. The grand mean of the CSES for students was regressed on the summative score of cross-cultural experience in students, the mean of the PFS in students, and the mean of the MES. Alpha internal consistency estimates were calculated for the total PFS, MES, and CSES.

Prior to submitting the data to the regression procedure, exploratory analysis was conducted by plotting variables on a histogram and calculating measures of central tendency. Frequency distributions were assessed for outliers.

Residual analysis was used to test assumptions of regression (Ferketich & Verran, 1984). The residual is the difference between the actual and the predicted score. The residual consists of both random and systematic error. The assumptions of multiple regression include normality, homoscedasticity, and linear relationship (Munro & Page, 1993). A correctly specified model is the ideal and may not be met in early model building efforts. Therefore the goal was to assess how well the model approached the ideal (Ferketich & Verran, 1984). A Pearson Product Moment Correlation Coefficient (r)

was used to analyze the relationship of each independent variable with the CSES. In addition, a Pearson Product Moment Correlation Coefficient (r) was used to analyze the relationship with the CSES and VACSES as a means of supporting concurrent validity of the CSES. ANOVA was used to explore differences in self-efficacy across the three racial/ethnic groups of Blacks/African Americans, Latino/Hispanics, and Native Americans.

Missing values were replaced by a mean calculated from the available data. The means replaced the missing values prior to regression analysis. In the absence of other information, the mean is the best guess about the value of a variable. The use of an overall mean is conservative. The mean for the distribution as a whole does not change but the variance of the variable is reduced because the mean is closer to itself than to the missing values it is replacing (Tabachnick & Fidell, 1989). In this case the group mean, rather than the distribution as a whole, was used (i.e. BSN senior group from the same school). Using a group mean is not as conservative as inserting an overall mean value (Tabachnick & Fidell, 1989).

Summary

Chapter three described the study approach, design, sample, setting, instruments, data collection technique, and data analysis technique. This study employed a cross-sectional, nonexperimental, survey design with a convenience sample of 351 nursing students. The instruments included the Participant Profile, the CSES, the PFS and MES developed by the researcher. Plans for data analysis were discussed using multiple

regression and Pearson Product Moment Correlation Coefficient (r) to test the hypotheses. The procedure for multiple regression along with plans for using residual analysis to test assumptions of multiple regression were discussed.

CHAPTER 4

ANALYSIS OF DATA

Chapter four includes a description of the sample and the findings of the data analysis. The data were analyzed using stepwise multiple regression to test the proposed model on cross-cultural experience, model competence, performance feedback, and cultural self-efficacy. Univariate exploratory data analysis was conducted to determine the skewness, kurtosis, and outliers for each variable. The Pearson Product Moment Correlation (*r*) was calculated to test the correlation of the Cultural Self-efficacy Scale (CSES) and the Visual Analogue Cultural Self-efficacy Scale (VACSES) for purposes of assessing concurrent validity. Then multivariate exploratory data analysis was conducted to determine correlations between each pair of variables and detect any multivariate outliers. Residual analysis was conducted to test the assumptions of regression. ANOVA was used to test demographic variables with cultural self-efficacy for interest and possible later research.

Munro and Page (1993) define outliers as values that are extreme to the bulk of the distribution. Outliers appear to be inconsistent with the rest of the data. Univariate exploratory data analysis was conducted to determine outliers by an objective method in order to prevent undue data manipulation, such as removing very high or very low values that are not really outliers (Munro & Page, 1993). Munro & Page (1993) explain that a

traditional way of labeling outliers has been to locate any values that are more than 3 standard deviations from the mean. This method was utilized to determine outliers for this study.

Three respondents were identified as outliers by ages reported as 55, 57 and 58. Eleven licensed respondents reported years of experience greater than 14.82 years and 13 students reported having lived outside of the United States more than 15.29 years. Sixteen respondents reported having the ability to speak more than 1.71 foreign languages fluently. Two respondents were identified as outliers for being conversant in more than 2.11 foreign languages and six reported knowing a minimal amount of more than 3.54 languages. Six students were identified as outliers by their reports of completing more than 5.34 non-nursing courses that had the word "culture," "race" or "minority" in the course name or course description. Twelve respondents reported having more than 78.58 clock hours of attendance at conferences, seminars, or field trips that focused on cultural diversity or different racial/ethnic cultures.

A total of 52 subjects were identified as having reported outliers. Fourteen of the 52 subjects reported more than two outliers and 3 subjects reported outliers on 3 items. Data analysis was undertaken with the outliers remaining in the data set and with the outliers removed from the data set in order to address their inclusion and exclusion. Both data sets also included missing data. Cross-cultural experience demonstrated the greatest change when subjected to inclusion and exclusion of outliers. With the outliers in (N =

346), Cross-cultural Experience resulted in a grand mean of 79.80 (S. D. = 52.99). With the outliers removed (N = 271), the grand mean was 72.57 (S. D. = 48.36).

In analyzing the data for model competence with the outliers included (N = 316), the grand mean was found to be 4.14 (S. D. = .49). With the outliers removed (N = 271) the mean was 4.15 (S. D. = .46).

Performance feedback was also subjected to data analysis including and excluding the outliers. With the outliers in the data (N = 341), the mean was 3.93 (S. D. = .60). When the outliers were removed from the data (N = 294), the mean was 3.93 (S. D. = .58).

Cultural self-efficacy resulted in a grand mean of 3.39 (S. D. = .68) with the outliers included in the analysis (N = 298). When all outliers were removed from the data set (N = 253) the resulting mean was 3.39 (S. D. = .68).

Portney & Watkins (1993) argue that there is no adequate statistical rationale for discarding an outlier; however, if a causal factor can be identified, the point should probably be omitted, provided that the causal factor is unique to the outlier (p. 465). They suggested that it may be helpful to perform the regression with and without the outlier, to demonstrate how inclusion of the outlier changes the conclusions drawn from the data.

Cross-cultural experience, model competence, and performance feedback were regressed on cultural self-efficacy to test the first hypothesis. With the outliers in the data and the missing data not replaced (N = 260), model competence entered the equation first followed by cross-cultural experience. Performance feedback did not enter the equation.

The multiple R was .33. With the outliers removed and missing data not replaced (N = 225), model competence entered the equation first followed by cross-cultural experience and then performance feedback. The multiple R was .40.

Burns & Grove (1993) emphasize that "... outliers provide a way to test the generality of the findings....in selecting subjects, it may be important to seek out individuals who seem to be outliers" (p. 350). Extreme cases of outliers can be useful in confirming conclusions. The researcher can compare the extreme case with the theoretical model that was developed and determine the key factor that causes the model not to fit the case. Purposive sampling is often used to insure that extreme cases are included (Burns & Grove, 1993, p. 350). Because the exclusion of the outliers reduced the sample size below the suggested number for the sample size (N = 265), the decision was made to keep the outliers in the data analysis.

The issue of missing data was also addressed. The pattern of missing data is more important than the amount of missing data. Missing data scattered randomly through the data set seldom presents a serious problem. Non-randomly missing data can be serious because they affect the generalizability of the results. If a lot of data are missing from a small- to a moderate-sized data set, there may be problems (Tabachnick & Fidell, 1989). In addition to randomly missing data, eleven respondents in this study (N = 351) did not complete sections of or entire questionnaires. Three respondents did not complete the 48 items in the Cultural Self-Efficacy Scale related to Confidence in Knowledge of Cultural Patterns Within Different Ethnic/Racial Groups. Three students did not complete the

11-item Visual Analogue Cultural Self-efficacy Scale. Five students reporting their cultural heritage to be "Black/African-American" did not complete the 32 items on the Cultural Self-efficacy Scale for Knowledge of Cultural Patterns within Latino/Hispanics and Native Americans. Tabachnick & Fidell (1989) suggest that an effective way to estimate missing data is to insert the group mean for a missing value. In the absence of all other information, the mean is the best guess about the value of a variable and this method of inserting the group mean is not as conservative as using the overall mean values.

Data analysis was undertaken with the missing values in the data set and with the missing values replaced by group means to evaluate the impact of inclusion and replacement. With the missing data included (N = 346), Cross-cultural Experience resulted in a grand mean of 79.79 (S. D. = 52.98). With the missing data replaced with group means (N = 351), the grand mean was 79.38 (S. D. = 51.61).

In analyzing the data for model competence with the missing data included (N = 316), the grand mean was found to be 4.14 (S. D. = .49). With the missing data replaced with group means (N = 351) the mean was 4.15 (S. D. = .46).

Performance feedback was also subjected to data analysis including and replacing missing data. With the missing data (N = 341), the mean was 3.93 (S. D. = .60). When the missing data were replaced by group means (N = 351), the mean was 3.94 (S. D. = .55).

Cultural self-efficacy resulted in a grand mean of 3.39 (S. D. = .68) with the missing data included in the analysis (N = 298). When missing data were replaced by group means (N = 351), the resulting grand mean was 3.39 (S. D. = .66).

Cross-cultural experience, model competence, and performance feedback were regressed on cultural self-efficacy to test the first hypothesis. With the missing data (N = 260), model competence entered the equation first followed by cross-cultural experience. Performance feedback did not enter the equation. The multiple R was .33. With the missing data replaced with group means (N = 318), model competence entered the equation first followed by cross-cultural experience and then performance feedback. The multiple R was .36. With little difference found in the two methods and a desire to keep the sample size at 265 or above, the decision was made to replace missing data in this study with group means.

Description of the Sample

Three hundred fifty-one subjects including 180 associate degree and 171 baccalaureate degree students completed the 5 questionnaires. The investigator used SPSS for Windows Frequencies and Descriptive to analyze the demographic data. Students reported their cultural heritage as American Indian/Alaska Native, 31 (8.8%); Asian, 11 (3.1%); Black/African-American, 39 (11.1%); White, 255 (72.6%); Hispanic, 9 (2.6%); and Other, 6 (1.7%). Table 1 displays identified cultural heritage frequencies in the sample.

Students reported an age range of 19-58 with a mean of 29.7 years and a median age of 27. Age data were transformed to categories with 222 (63.2%) in the range of 19-30 years. Table 1 displays age characteristics of the sample.

In reporting education degrees earned, students reported that 264 (75.2%) had no degree and 58 (16.5%) had an associate degree. Twenty-four students (6.8%) reported having a baccalaureate degree other than nursing and 5 (1.4%) had masters degrees. No student reported having a doctorate. Table 1 displays education degrees of the sample.

Reporting of enrolled class level of freshman, sophomore, junior, or senior was confusing. Students in their final semester of particular associate degree programs answered their class status as "senior." After conferring with program directors, it was decided to not survey students in their first semester of a nursing program. Some experience with faculty members was necessary in order to respond to the Performance Feedback Scale (PFS). Classification of students by semester in their nursing programs proved to be more useful and was obtained from directors when arranging for data collection. Ninety-seven (27.6%) students were in the 2nd semester of their nursing programs. There were 156 (44.4%) students in their 3rd semester and 98 (27.9%) enrolled in their final semester. Table 1 displays semester of enrollment in the nursing program for the sample.

Licensure status was reported as unlicensed, 290 (82.6%); Licensed Practical Nurse, 44 (12.5%); and Registered Nurse, 17 (4.8%). The licensed practical nurses had a range of 0-25 years of experience as licensed nurses with a mean of 5.18 years and median

of 3.0 years. Registered nurses reported a range of 0-31 years as licensed nurses with a mean of 13.4 years and a median of 11.0 years. Table 1 displays the years of nursing experience of the licensed nurses.

The sample for the study was a convenience sample. The researcher did not attempt to stratify or control for certain demographic variables beyond selecting an equal number of baccalaureate and associate degree programs for the selection of the sample.

Instrument Reliability

The instruments used for data collection included a questionnaire for collecting demographic information, the Performance Feedback Scale (PFS), the Model Evaluation Scale (MES), the Cultural Self-efficacy Scale (CSES), and the Visual Analogue Cultural Self-efficacy Scale (VACSES). Data obtained from these instruments were analyzed with a computer program, SPSS Graduate Pack 8.0 for Windows (SPSS, Inc., 1997). Utilizing the program, reliability coefficients were computed for this study. Alphas were computed on the PFS, the MES, the CSES, and the VACSES. Coefficient alpha or Cronbach's alpha is the most widely used index for measuring instrument reliability (Polit, 1996). Carmines & Zeller (1979) believe that reliabilities, as a general rule, should not be below .80 for widely used scales while Nunnally & Bernstein (1994) suggest that in group research a reliability of .80 is adequate. The reliability analysis of the PFS yielded an alpha of .93. The internal consistency estimate of the 17-item MES was .90. The internal

Table 1

Demographic Characteristics of the Respondents by Cultural Heritage, Age, and Semester in Nursing Program

Characteristics	Frequency	Valid %	Central Tendency	Range
Cultural Heritage				
American Indian/ Alaska Native	31	8.8	Mode:	
Asian	11	3.1	Caucasian	
Black/African-American	39	11.1		
Native Hawaiian/Other Pacific Islander	0	0.0		
White	255	72.6		
Hispanic	9	2.6		
Other	6	1.7		
Total	351	100.0		
Age				
19-30 years	222	63.2	Mean:	19-58
31-40 years	86	24.5	29.47	
41-50 years	36	10.3	Median:	
51-60 years	7	2.0	27	
Total	351	100.0		
Semester				
First Semester	0	0.0	Mode:	
Second Semester	97	27.6	Third	
Third Semester	156	44.4	Semester	
Fourth Semester	98	27.9		
Total	51	100.0		

Percentages may not total 100 because of rounding.

consistency estimate of the 26-item CSES for this population of student nurses was .96. Reliability of the 11-item VACSES was .88.

Findings

Cross-cultural experience was a summative score measured by the number of years a respondent lived outside the United States, if they spoke a foreign language and how well they spoke it. Cross-cultural experience also included the percentage of interactions in a student's daily life that included persons of racial/ethnic cultures different from their own and the percentage of patients/clients for whom they provided care whose racial/ethnic backgrounds were different from their own. The degree of fluency of foreign languages was weighted and computed like a letter grade when calculating cumulative grade point average. Fluency was rated as three, conversant as two, minimal as one, and none as 0.

Most of the subjects had spent their entire lives living within United States borders. When questioned about the number of years they had lived outside the United States, 300 (85.5%) reported that they had never lived outside the United States. Data were collapsed and recoded for purposes of displaying a frequency distribution in Table 2.

Students were asked to identify the number of foreign languages they could speak fluently. A majority of 316 students (90.0%) reported that there were no languages they could speak fluently; however, 35 students spoke one or more foreign languages fluently (Table 2). When asked how many languages there were in which they could converse, 277 students (78.9%) reported no languages. One hundred three students (29.3%)

reported that they could not speak a foreign language even minimally. One hundred eighty-one students (51.6%) could speak at least one foreign language minimally and 52 students (14.8%) could speak two languages minimally (Table 2).

For percentage of the interactions in their daily life with persons of racial/ethnic cultures different from their own, students reported a range of 0-100% with a mean of 35.87%. When asked the estimated percentage of patients/clients for whom they have provided care whose racial/ethnic backgrounds were different from their own, students reported a range of 0-100% with a mean of 41.29%. Table 2 displays the results of daily interactions and patients for whom care was provided.

Cultural diversity education, for purposes of this study, was measured by the number of non-nursing and nursing courses related to culture, race, or minorities plus the total number of clock hours attended in conferences, workshops, etc. related to cultural diversity. Students reported a range of 0-10 for the number of *non-nursing* courses they had completed that had the word "culture," "race," or "minority" in the course name or course description. The mean was 1.01 and the mode was 0. Students enrolled in the same semester of their nursing program also reported that they had completed anywhere from 0-10 *nursing* courses that had the word "culture," "race," or "minority" in the course name or course description. This range of courses was not possible within the confines of this particular student group's curriculum options. The nursing programs utilized in the study all have nursing curriculums that are completed in a determined sequence. The sequence of courses, the semesters they were offered, and their descriptions were

confirmed by the researcher through university catalogues and communications with program directors. The schools had also confirmed with the researcher, when arranging for data collection, the enrolled semester for each group of students surveyed. Knowing the courses, the semesters they were offered and the students' placement in the program allowed for determination of the number of nursing courses completed that had the word "culture," "race," or "minority" in the course name or course description. Because of the questionable reliability of the self-reported data on this question, the known data was used. The range for the number of this type of nursing course completed by nursing students was 0-2 courses with a mean of .59 and a mode of 0. Cultural diversity education data are displayed in Table 3.

Students reported a range of 0-200 hours for attendance at conferences, seminars or field trips related to cultural diversity or different racial/ethnic cultures. Of the 351 respondents, 51.6 % reported they had not attended any conferences, seminars or field trips. The mean was 10.78 hours and the mode was 0.0. Results are displayed in Table 3.

Performance Feedback in Cultural Diversity Education

Student's perceptions of performance feedback by their nursing faculty was measured by the Performance Feedback Scale (PFS) developed by the researcher and enhanced with the help of five nursing faculty experts in cultural diversity education. The scale includes 17 items describing various forms of evaluative feedback from nursing

Table 2

Characteristics of the Respondents by Years Lived Outside the United States, Foreign Languages Spoken, Daily Interactions, and Patients for Whom Care was Provided

Characteristics	Frequency	Valid %	Central Tendency	Range
Years Lived Outside the United States				
0 Years	300	85.5	Mean: 1.34	0-40
Less than year	9	2.6	Mode: 0	
1-10 Years	25	7.1		
11-20 Years	12	3.4		
21-30 Years	2	.6		
31-40 Years	3	.9		
Total	351	100.0		
Foreign Language-Fluent				
0 Language	316	90.0	Mean: .16	0-3
1 Languages	19	5.4	Mode: 0	
2 Languages	12	3.4		
3 Languages	4	1.1		
Total	351	100.0		
Foreign Language-Converse				
0 Language	277	78.9	Mean: .29	0-3
1 Languages	49	14.0	Mode: 0	
2 Languages	23	6.6		
3 Languages	2	.6		
Total	351	100.0		

Percentages may not total 100 because of rounding

Table 2 (continued)

Characteristics	Frequency	Valid %	Central Tendency	Range
Foreign Language-Minimal				
0 Language	103	29.3	Mean: .96	0-5
1 Languages	181	51.6	Mode: 1.0	
2 Languages	52	14.8		
3 Languages	9	2.6		
4 Languages	4	1.1		
5 Languages	2	.6		
Total	351	100.0		
Percentage of Interactions in Daily Life with Persons of Different Culture				
Interactions ≤50%	274	78.1	Mean:	0-100%
Interactions >50%	77	21.9	35.87%	
Total	351	100.0	Mode: 50.0%	
Percentage of Patients Cared for from Different Cultures				
Interactions ≤50%	269	76.6	Mean:	0-100%
Interactions >50%	82	23.4	41.29%	
Total	351	100.0	Mode: 50.0%	

Percentages may not total 100 because of rounding

instructors related to cultural diversity education. Respondents indicated their agreement with each item on a 5-point Likert scale. Results are found in Table 4.

Table 3

Characteristics of the Respondents by Non-nursing Courses, Nursing Courses, and Clock Hours of Attendance at Conferences, Seminars, or Field Trips That Focused on Cultural Diversity or Different Racial/Ethnic Cultures

Characteristics	Frequency	Valid %	Central Tendency	Range
Non-nursing Courses				
0 Courses	181	51.6	Mean: 1.01	0-10
1-5 Courses	164	46.7	Mode: 0	
6-10 Courses	6	1.7		
Total	351	100.0		
Nursing Courses				
0 Course	205	58.4	Mean: .60	0-2
1 Course	82	23.4	Mode: 0	
2 Courses	64	18.2		
Total	351	100.0		
Clock Hours in Conferences				
0	181	51.6	Mean: 10.78	0-200
1-10	80	22.8	Mode: 0	
11-20	43	12.3		
21-30	14	4.0		
31-40	10	2.8		
41-50	8	2.3		
51-60	1	.3		
71-80	4	1.1		
91-100	8	2.3		
120	1	.3		
200	1	.3		
Total	351	100.0		

Percentages may not total 100 because of rounding

Table 4

Descriptives of Performance Feedback in Cultural Diversity Education (N = 351).

Variable	Mean	*S.D.*
I have received positive evaluative feedback from nursing instructors about my cultural knowledge of:		
Client's beliefs about disease and illness	4.01	.75
Patterns of disease and illness	4.02	.75
Traditional folk health practices	3.72	.92
Spiritual practices related to health	3.93	.84
Beliefs toward respect and authority	4.26	.74
Beliefs toward modesty	4.23	.75
I have received positive evaluative feedback from nursing instructors about my awareness of:		
How cultural biases may influence care of a culturally different client	4.16	.76
Different interpersonal styles used when interacting with a culturally diverse client	4.05	.76
A client's heritage consistency	3.84	.79
I have received positive evaluative feedback from nursing instructors about my assessment of a client's:		
Rituals in the treatment of illness and injury	3.81	.83
Use of remedies in the treatment of illness and injury	3.66	.89
Use of traditional healers	3.55	.94
Spiritual practices related to health	3.88	.86
I have received positive evaluative feedback from nursing instructors about my:		
Exploration of my own cultural heritage	3.62	.97
Sensitivity to a client's cultural values	4.17	.67
Appropriate communication	4.25	.67
Culturally specific interventions	3.90	.86

Model Competence

The Model Evaluation Scale (MES) was developed by the researcher to measure model competence. This 17-item scale utilized the same content items developed by the researcher for the Performance Feedback Scale (PFS). With the Model Evaluation Scale (MES), students were asked to rate their nursing role model on the same items that were used to rate nursing faculty in performance feedback. As with the PFS, students completing the MES indicated their agreement with each item on a 5-point Likert scale. The questionnaire first asked students if they had a nursing role model who is most like the nurse they would like to be. Thirty-three responded that they did not have a role model and 318 reported that they did have a role model. Those who replied positively completed the remaining questions on the instrument. Table 5 displays the results.

Perceived Cultural Self-efficacy

Bernal & Froman's Cultural Self-efficacy Scale (1993) was used to measure perceived cultural self-efficacy in nursing students. Students were asked to rate their confidence levels regarding knowledge of cultural concepts, knowledge of cultural patterns within 3 different ethnic/racial groups, and confidence in specific nursing skills. In all cases "Very little confidence" was translated to a rating of 1; "Quite a lot of confidence," to a rating of 5.

There was only slight variation in the means for confidence in knowledge of distinguishing between inter and intra cultural diversity(3.07), distinguishing between

Table 5

Descriptives of Model Competence (N = 318).

Variable	Mean	*S.D.*
The nurse demonstrates cultural knowledge about:		
Client's beliefs about disease and illness	4.27	.70
Patterns of disease and illness in different racial/ethnic groups	4.22	.71
Traditional folk health practices	3.76	.85
Spiritual practices related to health	4.09	.80
Beliefs toward respect and authority	4.54	.66
Beliefs toward modesty	4.44	.73
The nurse demonstrates awareness of:		
How cultural biases may influence care of a culturally different client	4.32	.71
Different interpersonal styles used when interacting with a culturally diverse client	4.25	.70
A client's heritage consistency	4.04	.70
The nurse demonstrates assessment of a client's:		
Rituals in the treatment of illness and injury	4.02	.78
Use of remedies in the treatment of illness and injury	3.78	.82
Use of traditional healers	3.55	.86
Spiritual practices related to health	4.01	.81
The nurse demonstrates:		
Exploration of their own cultural heritage	4.11	.75
Sensitivity to a client's cultural values	4.50	.55
Appropriate communication	4.55	.57
Culturally specific interventions	4.08	.77

ethnocentrism and discrimination (3.84), and distinguishing between ethnicity and culture (3.81). The standard deviation ranged from .87-.91.

When asked about their confidence in their knowledge of cultural patterns, respondents reported the highest level of confidence (3.51) in their knowledge of cultural patterns in Blacks/African-Americans and the lowest level of confidence (3.19) for Latino/Hispanics. The highest mean self-efficacy rating (3.74) was for economic style of living in Blacks/African-Americans. The lowest reported mean self-efficacy rating (2.84) was found in utilization of traditional folk health practices in Latinos/Hispanics.

In the category of using specific transcultural nursing skills, the range of mean scores was 3.39 – 4.06 with the lowest confidence in developing a geneogram and the greatest confidence in participant observation. Results are displayed in Table 6.

Visual Analogue Cultural Self-efficacy Scale

The Visual Analogue Cultural Self-efficacy Scale (VACSES) was developed by the researcher to assess concurrent validity of the CSES. The visual analogue scale has traditionally been used as a horizontally oriented scale without markings. Students were asked to respond to questions on the VACSES. These questions correspond to items or subscales on the CSES. The relationship of these two instruments was used to test the concurrent validity of the CSES. There were 11 items on the VACSES. The

Table 6

Descriptives of Perceived Cultural Self-efficacy (N = 351)

Variable	Mean	*SD*
Confidence in my knowledge of cultural concepts:		
Distinguishing between inter and intra cultural diversity	3.07	.91
Distinguishing between ethnocentrism and discrimination	3.84	.89
Distinguishing between ethnicity and culture	3.81	.87
Confidence in my knowledge of cultural patterns in:		
Blacks/African-Americans		
Family organization	3.72	.96
Role differentiation	3.57	1.03
Child care practices	3.57	1.05
Utilization of health system	3.72	1.00
Types of social supports	3.67	1.05
Utilization of traditional folk health practices	3.01	1.18
Nutritional patterns	3.63	1.07
Economic style of living	3.74	.97
Migration patterns	2.90	1.24
Class structure	3.22	1.22
Employment patterns	3.44	1.13
Patterns of disease/illness	3.69	.96
Beliefs about health and illness	3.50	1.09
Beliefs toward respect and authority	3.67	1.03
Beliefs toward modesty	3.48	1.15
Religious beliefs and patterns	3.65	1.05
Latinos/Hispanics		
Family organization	3.48	1.91
Role differentiation	3.30	1.10
Child care practices	3.22	1.13
Utilization of health system	3.36	1.06
Types of social supports	3.33	1.06
Utilization of traditional folk health practices	2.84	1.14
Nutritional patterns	3.29	1.10
Economic style of living	3.38	1.05
Migration patterns	2.87	1.20
Class structure	2.86	1.14

Table 6 (continued)

Variable	Mean	*SD*
Latinos/Hispanics (continued)		
Employment patterns	3.12	1.14
Patterns of disease/illness	3.15	1.05
Beliefs about health and illness	3.09	1.11
Beliefs toward respect and authority	3.33	1.09
Beliefs toward modesty	3.20	1.15
Religious beliefs and patterns	3.30	1.07
Native Americans		
Family organization	3.44	1.10
Role differentiation	3.36	1.12
Child care practices	3.21	1.13
Utilization of health system	3.52	1.09
Types of social supports	3.41	1.18
Utilization of traditional folk health practices	3.24	1.22
Nutritional patterns	3.27	1.21
Economic style of living	3.40	1.12
Migration patterns	2.86	1.23
Class structure	2.99	1.20
Employment patterns	3.06	1.16
Patterns of disease/illness	3.45	1.11
Beliefs about health and illness	3.36	1.12
Beliefs toward respect and authority	3.54	1.10
Beliefs toward modesty	3.35	1.20
Religious beliefs and patterns	3.37	1.17
Confidence in the following specific nursing skills:		
Using an interpreter	3.60	1.21
Entering an ethnically distinct community	3.51	1.08
Advocacy	3.92	.91
Performing a 24 hour diet review	3.80	1.06
Participant observation	4.06	.89
Taking a history	3.97	.98
Developing a geneogram	3.39	1.21

first item on the VACSES corresponds with the subscale mean of the first three items on the CSES, which represent the subscale of "Knowledge of Cultural Concepts." The next three items on the VACSES correspond with the "Knowledge of Cultural Patterns" subscales on the CSES. Item number two on the VACSES asks "How much confidence do you have in your knowledge of cultural patterns within Black/African-American groups? This corresponds with the Black/African-American subscale of the CSES. Items three and four of the VACSES also correspond with their respective CSES subscales for Latino/Hispanics and Native Americans cultural patterns. Finally, items five through 11 of the VACSES correspond with the following items about confidence in specific nursing skills on the CSES: (a) Using an interpreter, (b) entering an ethnically distinct community, (c) client advocacy, (d) performing a 24-hour diet review, (e) participant observation, (f) taking a life history, and (g) developing a geneogram. Each of the 11 items on the VACSES included a horizontal visual analogue scale or line of 100 mm in length with anchors at each end representing the extremes of the questions under study, "little confidence" and "quite a lot of confidence." Students were asked to place a vertical mark on the horizontal lines to represent their answers on the VACSES questions. Table 7 demonstrates the resulting means and standard deviations for the VACSES.

Table 7

Descriptives of the Visual Analogue Cultural Self-efficacy Scale (N = 351)

Variable	Mean	*SD*
Confidence in my knowledge of cultural concepts:	5.63	1.77
Confidence in my knowledge of cultural patterns in:		
Blacks/African-Americans	5.91	2.27
Latinos/Hispanics	4.96	2.33
Native Americans	5.32	2.47
Confidence in the following specific nursing skills:		
Using an interpreter	6.29	2.49
Entering an ethnically distinct community	6.00	2.53
Advocacy	7.16	2.13
Performing a 24 hour diet review	6.66	2.25
Participant observation	7.32	1.87
Taking a history	7.21	2.03
Developing a geneogram	5.83	2.83

Correlation of the Cultural Self-efficacy Scale and the Visual Analogue Cultural Self-efficacy Scale

The measured distance on the line of the VACSES where the respondent placed their vertical mark was correlated with subscale means or item means on the CSES. The first four items of the VACSES were correlated to four subscale means on the CSES. . For example, item one on the VACSES corresponds to the combined means of the first three items on the CSES, which make up the subscale of "Confidence in my knowledge of cultural concepts." The distance was measured on the horizontal line from the left anchor mark to the student's drawn vertical mark on each item of the VACSES. This

measurement was then correlated with the subscale mean of "Confidence in my knowledge of cultural concepts" on the CSES. The remaining seven items on the VACSES were compared to the means of the corresponding items on the CSES. The Pearson Product Moment Correlation Coefficient (r) is the most usual method by which the relation between two variables is quantified and was the measurement used to establish concurrent validity of the CSES. The correlation of the means of the CSES and the responses on the VACSES about their knowledge of cultural concepts was significant at the .01 level (2-tailed). Correlations of the means of the CSES and the responses on the VACSES about knowledge of cultural patterns in Blacks/African-Americans, Latino/Hispanics, and Native Americans were also significant at the .01 level. Correlations of specific nursing skills on both instruments were significant at the .01 level. Results are displayed in Table 8.

The purpose of the study was to test a proposed model based on Bandura's construct of self-efficacy. The aim of model testing is to identify those concepts which best explain a dependent or outcome phenomena. In this study stepwise multiple regression was used for testing the proposed hypotheses and for an exploratory test of the model (Figure 1) in an attempt to isolate the separate contributions to the dependent variable (perceived cultural self-efficacy) made by the set of proposed independent variables (cross-cultural experience, performance feedback, and model competence) in a recursive linear model.

Because the exclusion of the outliers reduced the sample size below the suggested number for the sample size (N = 265), the decision was made to keep the outliers in the

Table 8

Pearson Product Moment Correlation Coefficient (r) for Correlation of the Cultural Self-efficacy Scale and the Visual Analogue Cultural Self-efficacy Scale (N = 351)

Variable	Pearson r	Sig. (2-tailed)
Confidence in knowledge of cultural concepts	.52**	.000
Confidence in knowledge of cultural patterns in:		
Blacks/African-Americans	.78**	.000
Latinos/Hispanics	.76**	.000
Native Americans	.81**	.000
Using an interpreter	.76**	.000
Entering an ethnically distinct community	.80**	.000
Client advocacy	.74**	.000
Performing a 24-hour diet review	.76**	.000
Participant observation	.73**	.000
Taking a life history	.80**	.000
Developing a geneogram	.87**	.000

**Correlation is significant at the 0.01 level (2-tailed).

data analysis. Data analysis was then undertaken with the missing values in the data set and with the missing values replaced by group means to evaluate the impact of inclusion and replacement. Because replacement with group means did not significantly impact the results and prevented reduction of the sample size , group means were substituted for missing data.

Evaluation of assumptions ruled out multicollinearity and singularity. Residuals were linear, normally distributed, and homoscedastic. Evaluations of skewness and kurtosis yielded results indicating little skewness on the Cultural Self-efficacy Scale

(CSES), the Model Evaluation Scale (MES), and the Performance Feedback Scale (PFS). Moderate skewness was found for cross-cultural experience. None of the variables demonstrated significant kurtosis.

The responses on the Model Evaluation Scale (MES) and the Performance Feedback Scale (PFS), both developed by the researcher for this study, were subjected to a principal components factor analysis with Varimax rotation. Exploratory factor analysis is often an early step in the process of achieving a multivariate perspective on a problem (Munro & Page, 1993). Principle Component Analysis was the method chosen. It extracts the maximum variance with each succeeding factor and is more commonly used. (Comrey, 1973). Rotation was used because it gives more interpretable factor analytic solutions (Kerlinger, 1986; Tabachnik & Fidell, 1989). Both scales utilized the same items, but one applied the items to the evaluation of a model and the other to feedback to students from nursing faculty. Factor analysis of the Model Evaluation Scale (MES) revealed 4 distinct and meaningful components underlying the 17 items. The four components accounted for 64% of the total variance. Principle components factor analysis of the Performance Feedback Scale (PFS) revealed 3 components underlying the same 17 items. The three factors accounted for 62% of the total variance for the PFS. It is important to note that components may change with different samples or in this case, response sets may influence the appearance of factors (Kerlinger, 1986). All items loaded on the main components for both scales suggesting that they represent the area to be measured and support the construct validity of the instruments.

The first hypothesis predicted that the independent variables of cross-cultural experience, performance feedback in cultural diversity education, and model competence would explain a significant portion of the variance in a model of perceived cultural self-efficacy. This hypothesis was tested with stepwise multiple regression. Stepwise regression determined the contributions of cross-cultural experience, performance feedback, and model competence to the prediction of cultural self-efficacy. SPSS Graduate Pack 8.0 for Windows regression analyzed the data. In stepwise regression, the independent variable that has the highest correlation with the dependent variable is entered first. The second variable that enters is the one that will increase the R^2 the most over and above what the first variable contributed (Munro & Page, 1993). Model competence, performance feedback, and cross-cultural experience were regressed on cultural self-efficacy. Model competence entered first followed by cross-cultural experience. Performance feedback was the last to enter. All of the variables increased the R^2 as they entered and significantly contributed to cultural self-efficacy. After the third and final variable entered the model, the multiple R was .36. Table 9 displays the multiple R, multiple R^2, F and the standardized coefficients (beta) after entry of all three independent variables.

The second, third and fourth hypotheses predicted positive relationships with each variable of cross-cultural experience, performance feedback, and model competence with cultural self-efficacy. The regression correlations showed significant positive relationships. Table 10 shows the results supporting these hypotheses.

Table 9

Stepwise Multiple Regression of Model Competence (MC), Cross-cultural Experience (CCE), and Performance Feedback (PF) on Cultural Self-efficacy (CSE) (N = 318)

Variable and step entered	R	R^2	*F*	Beta
1 MC	.242	.058	19.58**	.167*
2 CCE	.329	.108	19.16**	.222**
3 PF	.363	.132	15.91**	.167*

*$p<.01$, **$p<.001$

Table 10

Pearson Product Moment Correlation Coefficient (*r*) for Correlations of Cross-cultural Experience, Model Competence, Performance Feedback, and Cultural Self-efficacy (N = 351)

Variable	Pearson *r*	Sig. (one-tailed)
Cross-cultural Experience	.217**	.000
Model Competence	.242**	.000
Performance Feedback	.282**	.000

** Correlation is significant at the 0.01 level (one-tailed).

Additional Findings

To determine whether nursing students' perceived cultural confidence differed with respect to type of nursing program in which they were enrolled, analysis of variance (ANOVA) was conducted. A significance level of .05 was adopted for the analysis. Students differed significantly on distinguishing between inter and intra cultural diversity (F [1, 349] = 5.35, p<.05). Baccalaureate students had greater confidence in distinguishing between inter and intra cultural diversity than associate degree students. They did not differ significantly on distinguishing between ethnocentrism and discrimination and distinguishing between ethnicity and culture.

Baccalaureate students reported greater confidence in their knowledge of some cultural patterns within Blacks/African Americans. They differed significantly on family organization (F [1, 349] = 4.60, p<.05), role differentiation (F [1, 349] = 4.45, p<.05), child care (F [1, 349] = 7.39, p<.01), utilization of traditional folk practices (F [1, 349] = 6.13, p<.05), class structure (F [1, 349] = 6.66, p<.05), patterns of disease/illness (F [1, 349] = 4.97, p<.05), beliefs about health (F [1, 349] = 5.46, p<.05), and religious beliefs and patterns (F [1, 349] = 6.23, p<.05).

Students significantly differed on their knowledge of only one Latino pattern. Baccalaureate students reported more knowledge of Latino utilization of the health system (F [1, 349] = 3.93, p<.05).

Associate degree students reported significantly greater confidence in their knowledge of cultural patterns of Native Americans. They reported greater confidence in

their knowledge of family organization (F [1, 349] = 8.21, p<.05), role differentiation (F [1, 349] = 4.62, p<.05), child care practices (F [1, 349] = 4.62, p<.05), utilization of the health system (F [1, 349] = 5.37, p<.05), types of social support (F [1, 349] = 4.62, p<.05), nutritional patterns (F [1, 349] = 7.13, p<.05), economic style of living (F [1, 349] = 6.98, p<.05), employment patterns (F [1, 349] = 4.14, p<.05), beliefs about respect and authority (F [1, 349] = 7.58, p<.05), and beliefs toward modesty (F [1, 349] = 4.89, p<.05). Baccalaureate students reported significantly greater confidence in the specific nursing skills of participant observation (F [1, 349] = 4.88, p<.05) and developing a geneogram (F [1, 349] = 27.80, p<.01).

Two campuses had higher percentages of minority students. A baccalaureate program had 76% Black/African American in their students surveyed while another program with 15 associate degree students and nine RN-BSN completion students had 46.2% American Indian/Alaska Native in their students surveyed. When these two campuses were removed and the ANOVA was repeated with the remaining sample (N = 300) there were fewer significant differences in the responses of baccalaureate (N = 135) and associate degree (N =165) students. Results continued to demonstrate that baccalaureate students reported greater confidence than associate degree students in knowledge of Latinos' utilization of the health system (F [1, 298] = 4.07, p<.05). Associate degree students reported greater confidence in knowledge of Native American family organization (F [1, 298] = 5.42, p<.05), role differentiation (F [1, 298] = 4.43, p<.05), and types of social support (F [1, 298] = 5.18, p<.05). Only one nursing skill item

resulted in a significant difference. Baccalaureate students reported having more confidence in developing a geneogram (F [1, 298] = 14.06, p<.05).

Students having had no cultural diversity courses in their nursing programs reported greater overall cultural confidence (mean = 3.38) than students who took one cultural diversity course in their nursing program (mean = 3.33). Students who completed two cultural diversity courses in their nursing programs reported greater confidence (mean = 3.51) than students who had no courses or one cultural diversity course in their nursing programs. An ANOVA calculated to compare the means of students having had no cultural diversity courses, one cultural diversity course, or two cultural diversity courses in their nursing programs did not reach statistical significance.

Summary of Findings

Descriptive analysis of the sample provided a description of the students who participated in the study. Most of the participants were white (72.6%), unlicensed and between the ages of 19 and 32 (63.2%). Enrollment in types of nursing programs were almost equal with 51.3% in Associate Degree programs and 48.7% in Baccalaureate Degree programs. Only 14.5% had spent more than six months outside of the United States and only 10% spoke a foreign language fluently. They have interactions in their daily life with persons from cultures other than their own an average of 35% of the time. They care for patients from cultures other than their own an average of 42% of the time.

Reliability estimates for the researcher-developed MES and the PFS were high and the results of the Pearson r correlation with the CSES and VACSES demonstrated significant correlation to support concurrent validity.

The results of the study support the four hypotheses. Findings indicate that cross-cultural experience, model competence and performance feedback in cultural diversity education explain a significant portion of the variance in a model of perceived cultural self-efficacy. There is also a significant, positive relationship with each independent variable and perceived cultural self-efficacy.

CHAPTER 5

SUMMARY OF THE STUDY

Through the use of multiple regression, this study tested the theorized sources of self-efficacy (Bandura, 1997) by examining factors which might explain the variance in perceived cultural self-efficacy in nursing students. In addition, the VACSES was developed and used to assess concurrent validity of the CSES.

Bandura's theory of self-efficacy was tested indirectly through the empirical testing of a derived model of perceived cultural self-efficacy in nursing students. A convenience sample of 351 associate and baccalaureate degree nursing students from 10 college campuses participated in the study. Students were asked to complete 5 instruments, including the Model Evaluation Scale (MES). Thirty-three students responded that they did not have a nursing model, leaving 318 who responded positively and were retained in the study for purposes of testing the model of cultural self-efficacy in nursing students. Although model competence was significant in the model of cultural self-efficacy, it leaves some questions about the nine percent of respondents who report having no nursing role model.

The findings supported the selected variables as representing the sources of self-efficacy identified by Bandura. Cross-cultural experience was measured for its representativeness of enactive mastery, performance feedback was measured for verbal

persuasion, and model competence was measured for its representativeness of vicarious experience. Data were found to be significant.

Summary

The purpose of this cross-sectional, nonexperimental, survey design was to test a model proposing a relationship in cross-cultural experience, performance feedback, model competence and perceived cultural self-efficacy of nursing students. There were four hypotheses:

1. The independent variables of cross-cultural experience, performance feedback in cultural diversity education, and model competence will explain a significant portion of the variance in a model of perceived cultural self-efficacy.
2. There is a positive relationship between cross-cultural experience and the perceived cultural self-efficacy of nursing students
3. There is a positive relationship between performance feedback in cultural diversity education and the perceived cultural self-efficacy of nursing students.
4. There is a positive relationship between model competence and the perceived cultural self-efficacy of nursing students.

The study rationale was based on a phenomena of concern to nursing which might be explained from theoretical perspectives relevant to nursing and health care (Walker & Avant, 1995). Nurses in practice do not report even moderate levels of cultural confidence in caring for clients from cultures other than their own (Bernal & Froman, 1987, 1993) suggesting that nurses may not be educationally prepared to provide culturally competent care.

The study was based on Bandura's self-efficacy theory (1997). Self-efficacy theory proposes that efficacy expectations consist of beliefs about how capable one is of performing the behavior that leads to expected outcomes. These beliefs influence behavior in particular situations. Sources of efficacy beliefs include enactive mastery experiences, verbal persuasion, vicarious experience and physiological and affective states. Enactive mastery includes select experiences that are conducive to acquiring skills. Verbal persuasion of abilities is conveyed through positive evaluative feedback of an individual's performance. Vicarious experiences are mediated through modeled attainments. Individuals evaluate themselves vicariously through comparisons with models. Somatic information conveyed by physiological and emotional states assist people in judging their capabilities (Bandura, 1997). A model of cultural self-efficacy was derived from sources of self-efficacy identified by Bandura. The model postulates that cross-cultural experience (enactive mastery), performance feedback in cultural diversity education (verbal persuasion), and model competence (vicarious experience) contribute to cultural self-efficacy in nursing students.

Limitations

There were several limitations to the study. There was a lack of manipulation and randomization. The convenience sample was restricted to nursing students located in the Midwestern United States, which limits generalizability. Respondents may have inflated or underestimated their experiences, knowledge or skills or may have given socially acceptable answers. There may have been existing biases among students and inaccurate assumptions or generalizations based on their personal experiences with members of another cultural group. Alpers & Zoucha (1996) found that nursing students with no previous nursing education content in culturalism, self-identified greater confidence and competence in providing culturally appropriate care than students who had taken the nursing cultural diversity content . The researchers identified this as "arrogant ignorance" which could have been a limitation to this study. Bandura (1997) described it as "faulty assessment" in which beliefs of personal efficacy exceed performance. This may be based on inadequate knowledge of task demands or how a social system works. The major threat to validity was selection. Students who agreed to participate may have had different attributes than those who elected not to participate. Subjects differed in age, educational experiences, exposure to information, and historical events that influenced their life choices and attitudes.

There exists a possible historical threat to validity in that data collection took place in two schools of nursing just days after the plane crashes and collapse of the World Trade Center. When the researcher arrived to collect data at a community college in a large

metropolitan area, it was discovered that the school had experienced a bomb threat the day before and the campus was closed again on the day of the data collection because of another bomb threat. The researcher waited outside with nursing students waiting for an all-clear so that they could go into the building. One hour later the students were completing survey instruments regarding cultural diversity issues.

Instrument Reliability

The correlations between items on the researcher developed MES ranged from .14 to .69 and the reliability for the 17-item scale was .90. The PFS had between items correlations ranging from .21 to .75 and a .93 alpha for the scale reliability. The CSES yielded between item correlations ranging from .11 to .77. The reliability for the CSES was .97. The reliability of the VACSES was .88 and the range for correlations between items was .19 to .70.

Data Collection

Data collection occurred over 8 weeks. Consent letters were received from the directors of 8 schools of nursing and/or university institutional review boards. The sample consisted of 351 students from 10 baccalaureate and associate degree campuses. All students had completed at least one semester of their respective nursing programs. Students were visited in their classrooms and were asked to complete 5 instruments including the Participant Profile, the Model Evaluation Scale (MES), the Performance Feedback Scale (PFS), the Cultural Self-efficacy Scale (CSES), and the Visual Analogue Cultural Self-efficacy Scale (VACSES). Thirty-three students reported that they did not

have a role model and therefore, did not complete the Model Evaluation Scale (MES). The sample size for the test of the proposed model was 318 nursing students.

Outcomes

The first hypothesis (The independent variables of cross-cultural experience, performance feedback in cultural diversity education, and model competence will explain a significant portion of the variance in a model of perceived cultural self-efficacy) was tested with multiple regression. There was a significant portion of the variance explained by the three independent variables of cross-cultural experience ($\beta = .222, p = .000$), performance feedback ($\beta = .167, p < .01$), and model competence ($\beta = .167, p < .01$).

The second hypothesis (There is a positive relationship between cross-cultural experience and the perceived cultural self-efficacy of nursing students) was tested with a Pearson r Correlation (one-tailed). There was a statistically significant positive relationship between cross-cultural experience and the perceived cultural self-efficacy of nursing students ($r = .217, p<.01$). The third hypothesis (There is a positive relationship between model competence and the perceived cultural self-efficacy of nursing students) was found to have a statistically significant positive relationship ($r = .242, p<.01$). Finally, the fourth hypothesis (There is a positive relationship between performance feedback and the perceived cultural self-efficacy of nursing students) was also found to have a statistically significant positive relationship ($r = .282, p<.01$).

Additional findings included nursing students' perceived cultural confidence with respect to type of nursing program in which they were enrolled. Analysis of variance

(ANOVA) was conducted and it was found that students enrolled in associate degree nursing programs and baccalaureate degree programs differed significantly on some items. A significance level of .05 was adopted for the analysis. Students differed significantly on distinguishing between inter and intra cultural diversity. Baccalaureate students had greater confidence in distinguishing between inter and intra cultural diversity than associate degree students. They did not differ significantly on distinguishing between ethnocentrism and discrimination and distinguishing between ethnicity and culture.

When a campus with a greater amount of Blacks/African American students was removed from the sample, the baccalaureate students reported no significantly greater confidence than associate degree students in knowledge of cultural patterns of Blacks/African Americans. Baccalaureate students did demonstrate significantly greater knowledge of Latinos' utilization of the health system. When an associate degree program with a greater amount of Native Americans was removed from the sample, associate degree students as a group still demonstrated significantly greater confidence in knowledge of Native American family organization, role differentiation, and types of social support. Baccalaureate students reported having more confidence in the nursing skill of developing a geneogram.

Students having had no cultural diversity courses in their nursing programs reported greater overall cultural confidence than students who took one cultural diversity course in their nursing program. Students who completed two cultural diversity courses in their nursing programs reported greater confidence than students who had no courses

or one cultural diversity course in their nursing programs. An ANOVA calculated to compare the means of students having had no cultural diversity courses, one cultural diversity course, or two cultural diversity courses in their nursing programs did not reach statistical significance.

Discussion of Findings

The findings will be interpreted based on the literature reviewed in Chapter 2. Each relationship between variables found in this study will be compared to that found in the literature.

Bandura proposes that a major basis for human action is efficacy belief and unless people believe that they can achieve a desired effect by their actions, they have little incentive to act. Acting on accurate self-appraisals of one's ability increases the possibility for success. Self-efficacy beliefs are constructed from four principal sources of information: enactive mastery experiences that are indicators of capability; verbal persuasion through performance feedback that one possesses certain capabilities, vicarious experiences that change efficacy beliefs through the transmission of competencies of others, and physiological and affective states from which individuals partly judge their capabilities, strengths, and vulnerabilities to dysfunction. The proposed model of perceived cultural self-efficacy tested in this study was based on enactive mastery as represented by cross-cultural experience, verbal persuasion as demonstrated in performance feedback in cultural diversity education, and vicarious experiences as evidenced by model competence.

Cross-cultural experience is an interaction with a culture other than your own in which knowledge, skill, or practice is derived from direct observation or participation in events. Pope-Davis, Eliason, and Ottavi (1994) examined cross-cultural experience in their study of undergraduate nursing students'(N = 120) multicultural competencies in working with culturally diverse clients. Scores indicated that students with work experience had significantly more perceived multicultural skill and knowledge but not more multicultural awareness or relationship. Thirty-three percent of the participants had work experience in the nursing field and half of those had worked with a minority client within the last three months. The other half had worked with a minority client more than three months previously. None of the students who participated in the investigation had completed a course or seminar addressing multicultural issues in nursing. Pope-Davis, Eliason, and Ottavi (1994) speculated that these students may have acquired a false cultural awareness based on stereotypes. Also, they may have developed a set of general skills and knowledge for the work environment without fully comprehending why these skills are necessary. The results of this study showed that the degree of positive relationship between cross-cultural experience and the perceived cultural self-efficacy of nursing students was statistically significant. Smith (1998b) concluded in a study of southern-based hospital-employed RNs that percent of clients cared for with culturally different backgrounds contributed to CSES total scores.

The beta weight of cross-cultural experience on perceived cultural self-efficacy in this study was .222 (p = .000). The correlation of cross-cultural experience and

perceived cultural self-efficacy was also significantly positive ($r = .22$, $p = .000$). This study, therefore, did support the findings of Pope-Davis, Eliason, and Ottavi (1994) and Smith (1998b).

Performance feedback is evaluative appraisal of one's capabilities (Bandura, 1997). For purposes of this study, performance feedback was examined in relation to cultural diversity education. Persuasory efficacy is often conveyed in the evaluative feedback given to performers. Nursing education provides opportunities for this type of feedback leading to performance accomplishments in nurses. Students may receive feedback in the form of pre- and post-tests, comments on scholarly papers, or verbal feedback during post-conference and clinical performance appraisals. Studies involving performance feedback to nursing students in cultural diversity education were not found in the literature.

The results of this study demonstrated that the degree of positive relationship between performance feedback in cultural diversity education and the perceived cultural self-efficacy of nursing students was statistically significant. The beta weight of performance feedback regressed on perceived cultural self-efficacy was .167 ($p = .004$). In addition, the correlation of performance feedback and perceived cultural self-efficacy also demonstrated a significantly positive relationship ($r = .28$, $p = .000$).

Flavin (1997) found in a related study that home care nurses who took cross-cultural training which included pre- and post-test feedback about various forms of

learning experiences reported increased learning, increased skills in interacting with the focal cultures, and increased overall satisfaction.

Model competence is an ability to influence and teach through instructive demonstration of skills and strategies leading to increased efficacy in the observer (Bandura, 1997). Nursing students in this study were asked to rate their nursing role model in relation to cultural awareness, knowledge and skills. As would be expected of students rating their ideal nurse, nursing students rated their models moderately high (3.77 - 4.54). The results of the regression showed that the degree of positive relationship between model competence and the perceived cultural self-efficacy of nursing students was statistically significant. The beta weight of model competence regressed on perceived cultural self-efficacy was .167 (p = .004). The correlation of model competence and perceived cultural self-efficacy also demonstrated a significantly positive relationship (r = .24, p = .000). Napholz (1999) found that when nursing students were exposed to clinical onsite consultations with an expert in cultural nursing, post-test scores were higher than for students with no consultation, suggesting that a competent model was associated with greater cultural competency skills in students. The results of this study support Napholz's findings.

Results of the CSES indicate that the majority of ratings did not reach even moderate levels (4 on the scale) as defined by Bernal & Froman (1987). Students did report a mean of 4.06 for the skill of participant observation. The results of this study support Bernal & Froman's findings in their study with community health nurses where

ratings did not reach a rating of four. Kulwicki & Boloink (1996) also found that at no time did ratings on the CSES even reach a level of 3.0 in nursing students who were asked to rate their cultural confidence in relation to the maternal-child client population from five cultural backgrounds.

Analysis of variance (ANOVA) was conducted to determine whether nursing students' perceived cultural confidence differed with respect to type of nursing program. Baccalaureate students had greater confidence in distinguishing between inter and intra cultural diversity than associate degree students. They did not differ significantly on distinguishing between ethnocentrism and discrimination and distinguishing between ethnicity and culture.

Baccalaureate students reported greater confidence in their knowledge of some cultural patterns within Blacks/African Americans. Baccalaureate students also reported a more significant difference in knowledge of Latino utilization of the health system. Students enrolled in baccalaureate programs reported significantly greater confidence in the specific nursing skills of participant observation and developing a geneogram.

Associate degree students reported significantly greater confidence in their knowledge of cultural patterns of Native Americans. They reported greater confidence in their knowledge of family organization, role differentiation, child care practices, utilization of the health system, types of social support, nutritional patterns, economic style of living, employment patterns, beliefs about respect and authority, and beliefs toward modesty.

When two campuses with higher percentages of minority students were removed, there were fewer significant differences in the responses of baccalaureate and associate degree students. However, the results continued to demonstrate that baccalaureate students reported greater confidence than associate degree students in knowledge of Latinos' utilization of the health system. The baccalaureate programs had a total of eight (4.7%) Hispanic students while the associate degree programs had a total of one (.6%) student. Associate degree students reported greater confidence in knowledge of Native American family organization, role differentiation, and types of social support. Baccalaureate and associate degree programs were almost equal in the reported number of Native American students (8.8% and 8.9%). Three associate degree campuses were located in smaller communities with possibly more opportunities for interaction with Native American clients. Only one nursing skills item resulted in a significant difference. Baccalaureate students reported having more confidence in developing a geneogram. Developing geneograms may be more likely to be incorporated into separate community health nursing courses in baccalaureate education.

In a study with hospital-employed RNs, Smith (1998b) concluded that diversity-related continuing education programs contributed to CSES total scores. Alpers and Zoucha (1996) found that nursing students with no previous cultural diversity content self-identified greater confidence. Similar findings were a result in this study where students who had completed no cultural diversity courses in their nursing programs reported greater overall cultural confidence (N = 205, mean = 3.38) than students who took one

cultural diversity course in the nursing program (N = 82, mean = 3.33). Alpers & Zoucha (1996) proposed that this result suggests a true lack of cultural knowledge on their part and that this may be more reflective of a false cultural awareness. Bandura (1997) describes this type of response as a "faulty assessment" of one's abilities. Lower scores with the exposure to some cultural diversity content suggests that having had at least one course helped them to realize that they do not know enough about the various cultural groups. Increased confidence with no cultural diversity content in a nursing program may reflect perceived knowledge of cultural concepts and patterns of racial/ethnic groups based on stereotypes.

Conclusions and Implications

There are conclusions that can be drawn from the study's findings. Implications for nursing will be described along with each conclusion.

Because the sample was drawn from only one geographical area and was selected using a non-random technique, the findings of this study cannot be generalized to all nursing students. However the sample size was determined using power analysis with an alpha of .05, an effect size of .20, and a power of .80. Four variables were included in the model, three independent and 1 dependent variable. The suggested sample size was 265 (Northam & Marshall, 1995). The actual sample in the study was 351 with 318 used for the multiple regression which was optimal for avoiding a type II error.

The first hypothesis of the study was that cross-cultural experience, performance feedback of cultural diversity education, and model competence will explain a significant

portion of the variance in a model of perceived cultural self-efficacy. This hypothesis was supported at the .05 level of significance. The direction of the relationships were positive. The results were supportive of Bandura's theory and suggest theory-based implications for nurse educators. Nursing instructors can use this information for planning, implementing, and evaluating cultural diversity content in the curriculum. Faculty must provide opportunities in nursing education for students to have a variety of cross-cultural experiences. Multicultural experiences can incorporate clinical patient care assignments that include caring for minority clients who are representative of populations experiencing health disparities with specific illnesses such as diabetes, cardiovascular disease and cancer. When access to minority clients is limited, case studies can foster discussion of values, religion, dietary practices, family structure, beliefs and practices related to health and illness. Guest speakers from a variety of cultures can be invited to a Cultural Diversity Day. If cultural immersion experiences are not possible, students can be encouraged to access cultures and cultural issues around the world by becoming part of worldwide discussion groups on the Internet (Sommer, 2001).

Nurse educators should be aware of the value of verbal expressions and written feedback in providing positive reinforcement of student performance in caring for diverse clients. Role playing and videos can offer opportunities when experiences with clients from diverse cultures are limited. Even faculty members from other departments who represent minority races and ethnic groups can be invited to assist in role playing for purposes of student assessment and giving positive feedback.

Finally, the results support the need for competent faculty role models in transcultural nursing. Minority nurses should be encouraged to become educators, whether in a full time role or as clinical adjuncts. For others, administrators must be willing to provide faculty development opportunities in transcultural nursing. During data collection, a student commented that staff nurses, not nursing faculty, are students' role models. Nursing faculty should seek out and encourage staff nurses from minority cultures to act as mentors and preceptors to nursing students.

The second hypothesis of the study stated that cross-cultural experience is positively related to perceived cultural self-efficacy. This relationship in the hypothesis was supported; cross-cultural experience was positively correlated with perceived cultural self-efficacy ($r = .217, p = .000$). Cross-cultural experience was defined by years lived outside the United States; degree of fluency and number of languages spoken; interactions in daily life with persons of a different racial/ethnic culture; and providing care to persons of different racial/ethnic cultures. Implications for nursing include consideration for a foreign language in the nursing prerequisites. Nursing faculty must foster integration of cognitive and affective learning with experiential learning so that students develop an understanding of cultural differences (American Nurses Association, 1986). Cultural studies should be a conceptual thread in the curriculum and it must include a variety of cross-cultural experiences in the nursing program. Bernal & Froman (1993) emphasize that there is a need for increased student contact with diverse clients and that students need assignments with "guided" experiences, not merely observation.

The pilot study was conducted in the southern United States with a larger Hispanic population and the dissertation study was conducted in the Midwest with larger Native American populations. Students in the South reported greater confidence with Latinos/Hispanics and students in the Midwest reported greater confidence with Native Americans. These results supported direct task experience as the most potent source of efficacy expectations. It also supported Bernal & Froman's (1993) research related to personal history and direct task experience.

The third hypothesis stated that there is a positive relationship between performance feedback in cultural diversity education and the perceived cultural self-efficacy of nursing students. This hypothesis was supported. Performance feedback in cultural diversity education was positively correlated with perceived cultural self-efficacy ($r = .282, p = .000$). Many students overestimated how many nursing courses (0-10) they had completed that had the word "culture," "race," or "minority" in the course name or course description. These were adjusted based on information available from nursing program directors or by course descriptions. Students also reported a range of 0-10 for non-nursing courses based on the same defining criteria. These responses could not be verified and it is speculated that these answers were also inflated.

An item with one of the lowest ratings (3.62) on the PFS was "I have received positive evaluative feedback from nursing instructors about my exploration of my own cultural heritage." This may indicate that a minimal amount of time is devoted in assisting

students to explore and understand their feelings and values regarding their own cultural heritage.

Time and expertise went into the development of the PFS. Five transcultural nursing faculty reviewed and helped to refine the instrument. The PFS and the CSES could be valuable sources for content development and teaching strategies within a transcultural nursing course.

The fourth hypothesis states that there is a positive relationship between model competence and the perceived cultural self-efficacy of nursing students. The positive correlation (r = .242, p = .000) of these variables in the study supported this hypothesis. This study's outcome also supported Napholz's (1999) research of a cultural sensitivity intervention with nursing students by an identified expert in transcultural nursing. Students who experienced the onsite clinical consultations by the expert in cultural nursing perceived greater cultural competency skills. While it is important for a nursing curriculum to have a cultural thread, students also need more appropriate role models.

Recommendations for Further Study

The findings from this study suggest ideas for further research. Following are several recommendations for studies that should enhance or support the findings of this study.

1. This study tested a model of perceived cultural self-efficacy that was based on three of Bandura's principal sources of efficacy. A future study could incorporate into the model and test Bandura's fourth principal source of

efficacy information: physiological and affective states. Cross-cultural experience, performance feedback, and model competence explain only 13.2% (R^2 = .132) of the variance in cultural self-efficacy. People rely on somatic information conveyed by physiological and emotional states. They are more inclined to expect success when they are not experiencing stress reactions. Somatic information may be influenced by prior mastery experiences or failings, validation of capability in comparison with others, and appraisal by knowledgeable others (Bandura, 1997). The nursing student in the clinical and/or laboratory skills experience may perceive autonomic arousal leading to self-doubt as they are called on to perform before critically evaluative audiences or even when confronted with a non-English speaking client in a home visit.

2. If the study were to be repeated, it is recommended that alternate operational definitions for cultural diversity education be explored. In this study, only nursing courses with the word "culture," "race," or "minority" in the course name or course description met the operational definition. This discounts integrated cultural diversity content that may not be reflected in course names or descriptions. While the selection of terms was limited, the researcher considered the use of similar terms and the course intent. For instance, a course title of "Folk Healing" may not use the selected terms of "culture," "race," or "minority" in the title or course

description; however, the course may explore many cultural concepts. An integrated curriculum may have accounted for some of the increased scores on the CSES in this study for students who had no nursing courses meeting the operational definition for cultural diversity education.

3. If the study were to be repeated, it is recommended that alternate operational definitions for cross-cultural experience be explored.

4. "Arrogant ignorance" may have been a factor with some students in this study. Conducting a qualitative study related to cultural confidence may be enlightening and assist to explain the phenomenon of false cultural awareness or "arrogant ignorance" in some nursing students. This type of study might best be approached with a phenomenological method using an interview technique. Adding observation of nursing skills to this method might also be useful.

5. Little research has been done on faculty confidence in role modeling transcultural nursing. A qualitative study would begin that exploration of possible variables.

6. It is recommended that further validation of the researcher-developed PFS and MES, including factor analysis be done. Significant progress using factor analytic results is most likely to come from a series of programmatic investigations rather than from a single isolated study (Comrey, 1973).

7. A repeat of the study sampling students from various geographic locations would improve generalizability to all nursing students.

This study is only a beginning exploration of a proposed model of perceived cultural self-efficacy in nursing students. It is an interesting and complex process and is very pertinent to present and future nursing. Perhaps with more research, a more complete model of perceived cultural self-efficacy will emerge.

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APPENDIX A

Approval from Dissertation Committee for Prospectus

Texas Woman's University

Department/College/School of Nursing

Prospectus for X Dissertation or _____ Thesis

This prospectus proposed by Louise Talley
(Student Name) (SSN)

and entitled:

Cross-Cultural Experience, Performance Feedback, Model Competence, and Cultural Self-Efficacy: Analysis of a Model

has been read and approved by the members of her/his Research Committee.

This research (Check One)

X Involves human subjects or use of animals.
(Involving human subjects at external agencies requires written approval from those agencies.)

_____ Does not involve either human subjects or use of animals.

Dissertation/Theses signature page is here.

To protect individuals we have covered their signatures.

APPENDIX B

Approval Letter from the Graduate School for Prospectus

TEXAS WOMAN'S UNIVERSITY

1901 - 2001 CENTENNIAL

The Graduate School
P.O. Box 425649, Denton, TX 76204-5649
T 940-898-3400 F 940-898-3412

August 14, 2001

Ms. Louise Talley

Dear Ms. Talley:

I have received and approved the prospectus entitled **"Cross-Cultural Experience, Performance Feedback, Model Competence, and Cultural Self-Efficacy: Analysis of a Model"** for your *dissertation* research project.

Best wishes to you in the research and writing of your project.

Sincerely yours,

Michael H Droge

Michael H. Droge
Dean of Graduate Studies and Research

MHD/sts

cc Dr. Sally Northam, Nursing

APPENDIX C

Approval Letter from Human Subjects Review Committee

TEXAS WOMAN'S UNIVERSITY

INSTITUTIONAL REVIEW BOARD
P.O. Box 425619
Denton, TX 76204-5619
Phone: (940) 898-3377
Fax: (940) 898-3416
e-mail: IRB@twu.edu

May 10, 2001

Ms. Louise Talley

Dear Ms. Talley:

Re: Cross-Cultural Experience, Performance Feedback, Model Competence, and Perceived Cultural Self-Efficacy: Analysis of a Model

The above referenced study has been reviewed by a committee of the Institutional Review Board (IRB) and was determined to be exempt from further TWU IRB review.

If applicable, agency approval letters obtained should be submitted to the IRB upon receipt prior to any data collection at that agency. Because you do not utilize a signed consent form for your study, the filing of signatures of subjects with the IRB is not required.

Another review by the IRB is required if your project changes. If you have any questions, please feel free to call the Institutional Review Board at the phone number listed above.

Sincerely,

Dr. Linda Rubin, Chair
Institutional Review Board - Denton

cc. Dr. Carolyn Gunning, College of Nursing
Dr. Sally Northam, College of Nursing
Graduate School

APPENDIX D

Approval Letters from Participating Schools of Nursing and/or Colleges and University Institutional Review Boards

BACONE COLLEGE

SINCE 1880

July 23, 2001

Ms. Louise Talley, MS, RN
9948 East 115th St. S
Bixby OK 74008

Re: Cross-Cultural Experience, Performance Feedback, Model Competence, and Perceived Cultural Self-efficacy: Analysis of a Model

Dear Louise:

I am in receipt of your prospectus for the above named investigative project and have reviewed the instruments, which will be used. I believe your proposed study area is indeed worthy of investigation and you are most welcome to visit with our students for the purpose of collecting data for your study.

As you may or may not be aware, we have four categories of students. The first two groups are freshmen and sophomores earning their associate of applied science in nursing. This year we are anticipating 30 (generic) freshmen and 14 (generic) sophomores. The third group is our CAPN (LPN to RN) students. There are 3 sophomore CAPNs and in mid-October there will be approximately 10 freshmen CAPNs. Our fourth group is our RN to BSN students. Presently, there are 12 enrolled. While I have not completed demographics for the coming academic year, our ethnic student profile is typically comprised of 45-55% Native American students, 40% Caucasian students and 5% other ethnic representations. Our ADN curriculum includes content on cultural diversity and our BSN curriculum includes a specific course on transcultural nursing.

It will be interesting Louise, to read your aggregate findings for suggestions as to how we can strengthen the cultural component in our curriculum. Please call me in mid-August to discuss dates and times you would like to come and collect the data. My telephone number is 918-781-7325.

Sincerely,

Nancy Diede

Nancy Diede, MS, RN, CS
Dean, School of Health Sciences
Director, Nursing Education

2299 Old Bacone Road • Muskogee, OK 74403-1597
918/683-4581 • FAX 918/687-5913

LANGSTON UNIVERSITY

School of Nursing and Health Professions

Nursing • Health Administration • Gerontology • Physical Therapy

July 13, 2001

Ms. Louise Talley, RN, MS
Site Coordinator, Tulsa Campus
700 N. Greenwood
Tulsa, OK 74126

Dear Ms. Talley:

The purpose of this communication is to memorialize my approval of your request to survey nursing students on the Tulsa and Langston campuses. I am advising Dr. Manning, by copy of this letter, of my response to your request.

Best wishes for the successful completion of this outstanding goal.

Sincerely,

Carolyn T. Kornegay, RN, PhD
Director, School of Nursing

CTK
c: Dr. Jean B. Manning

Room 302, University Women Bldg. Langston, Oklahoma 73050 (405) 466-3411 FAX (405) 466-2915

Louise Talley, M.S., R.N.
9948 E. 115th St. S.
Bixby, Oklahoma 74008
(918) 369-2958 (H)
(918) 594-8078 (W)
alt.webzone.net (H)
ltalley@lunet.edu (W)

June 4, 2001

Dr. Jean Bell Manning
Vice-President, Academic Affairs
Langston University
Langston, Oklahoma 73050

Dear Dr. Manning:

As you know, I am a doctoral nursing student at Texas Woman's University. I am enrolled in dissertation with plans to test a proposed model by examining factors which might explain the variance in perceived cultural self-efficacy in nursing students. It may help us to understand what influences a nurse's confidence in caring for culturally diverse clients. I am writing to ask your permission to survey nursing students on the Tulsa and Langston campuses.

With your approval, I was able to do a pilot survey of students on the Tulsa campus enrolled during Spring semester, 2001. I would like to thank you for that opportunity to move forward on the completion of my dissertation.

My application to the Human Subjects Review Committee at Texas Woman's University has been approved for my dissertation prospectus. The Graduate School has also approved my prospectus, pending receipt of written approval on letterhead from institutions where the data will be collected. I am requesting your permission to collect data in the School of Nursing on the Langston and Tulsa campuses during the first third of the Fall 2001 semester.

I would like to ask the students to voluntarily participate in completing the survey packet. I anticipate that this activity will take approximately 20-25 minutes to complete all questionnaires. I would like to administer the instruments to students during or at the end of a class. Students will be served complementary refreshments for their time and participation.

You will find enclosed copies of the instruments for your review. Please contact me if you have any concerns or questions regarding my plans. Thank you again for your previous assistance in allowing me to conduct my pilot study and for considering this final request. Your support is most appreciated.

Sincerely,

Louise Talley

Louise Talley
Site Coordinator
School of Nursing
Tulsa Campus

Approved JBManning 6-12-01

Northeastern State University Tahlequah, Oklahoma 74464-2399 Telephone: (918) 456-5511
Office of Pre-Professional Health Advisor Ext. 3838

12 June 2001

Re: Request by Louise Talley to collect data from nursing students at Northeastern State University for a study entitled *Cross-Cultural Experience, Performance Feedback, Model Competence, Perceived Cultural Self-Efficacy: Analysis of a Model*

To whom it may concern:

As chair of the Human Experimentation Advisory Committee (our human subjects IRB), and upon the recommendation of Dr. Joyce VanNostrand, department head of Nursing, Northeastern State University conveys its approval for questionnaire administration by Ms. Talley to nursing students in our program.

Sincerely,

Craig Clifford
Chair, HEAC
Dept. of Biology
Northeastern State University
611 N. Grand Ave.
Tahlequah, OK 74464
(918) 456-5511 ext. 3827

Northern
Oklahoma College
P.O. Box 310
Tonkawa, Oklahoma 74653-0310
Fax No. 580-628-6674
Telephone 580-628-6679

August 16, 2001

Louise Talley
9948 E 115th Street South
Bixby OK 74008

Dear Louise,

I hereby give permission for Louise Talley to survey Northern Oklahoma College nursing students for her doctoral dissertation. We are excited to be a part of this process.

Sincerely,

Kim Webb, RN, MN

Kim Webb, RN, MN
Chair, Division of Nursing
Northern Oklahoma College
P.O. Box 310, 1220 E. Grand
Tonkawa, OK 74653
(580) 628-6679

KW/dd

OKC COMMUNITY COLLEGE

August 7, 2001

Louise Talley
9948 East 115th Street South
Bixby, Oklahoma 74008

Dear Ms. Talley:

This letter is to notify you that the Office of Research and the Department of Nursing have consented to your research project as described in your communication of July 27, 2001. Please continue to work with Ms. Lea Ann Loftis, Professor of Nursing.

If you have any questions or need additional information, please do not hesitate to contact me at (405) 682-1611 extension 7240, or via e-mail at jbarker@okc.cc.ok.us.

Sincerely,

John L. Barker, Ph.D.
Director of Research

cc: Dr. Jo Ann Cobble, Dean of Health Professions
Ms. Lea Ann Loftis, Professor of Nursing

Tulsa Community College

(918) 595-7000

CONFERENCE CENTER
6111 East Skelly Drive
Tulsa, OK 74135-6198

METRO CAMPUS
909 South Boston Ave.
Tulsa, OK 74119-2095

NORTHEAST CAMPUS
3727 East Apache
Tulsa, OK 74115-3151

SOUTHEAST CAMPUS
10300 East 81st Street
Tulsa, OK 74133-4513

WEST CAMPUS
7505 West 41st Street
Tulsa, OK 74107-8633

August 16, 2001

Louise Talley, M.S., R.N.
9948 E. 115th St. S.
Bixby, OK 74008

Dear Ms. Talley:

I have received your request for permission to survey nursing students at Tulsa Community College as part of your dissertation processes. The description of your proposed survey process and the instruments provided were very clear. We are pleased for you to consider surveying our students and agree to your request. Our only request is that we receive a copy of your survey results when they are available. The topic you have chosen is of great interest to us as well.

All of our students are enrolled in one of four (4) program levels this fall. Each level has a Level Coordinator who will facilitate the communication regarding the survey with students. I will be your contact for setting up the survey session(s). You can contact me at the phone number or email address listed below.

With kind regards,

Carole A Thompson

Carole A. Thompson, RN, MS
Associate Dean TCC Nursing Division
918.595.7190
cthompso@tulsa.cc.ok.us

UNIVERSITY OF
CENTRAL
OKLAHOMA

College of Mathematics & Science
Department of Nursing

July 7, 2001

Louise Talley, M.S., R.N.
9948 E. 115th St. S.
Bixby, OK 74008

Dear Ms. Talley,

I am in receipt of your request to utilize students enrolled in the nursing program at the University of Central Oklahoma as potential subjects in your research. I have reviewed the questionnaire which you will be utilizing to test a model examining factors in perceived cultural self-efficacy in nursing students. Permission is granted for you to administer your questionnaire at the end of a class in early Fall semester. The best day of the week for you to reach both junior and senior students is Monday.

Please give me a call, at your convenience, to select a date for you to administer the questionnaire to the UCO nursing students. We look forward to assisting you in your data collection and look forward to hearing the results of your study at a research conference in the near future.

If you need any further assistance, please do not hesitate to contact me at (405)974-5000.

Sincerely,

Patricia LaGrow

Patricia LaGrow, PhD, RN
Chairperson

THE UNIVERSITY of TULSA

OFFICE OF RESEARCH AND SPONSORED PROGRAMS

June 21, 2001

Mr. Louise Talley
9948 E. 115th St. S.
Bixby, OK 74008

SUBJECT: Protocol No. 02-02

Dear Ms. Talley:

Your research proposal "Cross-Cultural Experience, Performance Feedback, Model Competence, and Perceived Cultural Self-Efficacy: Analysis of a Model" has been reviewed by Dr. Thomas H. Buckley, Chair of the Institutional Review Board, and found to be exempt from the requirements for full board review and approval under the regulations of the University of Tulsa Campus Policies and Procedures for the Protection of Human Subjects in Research Activities.

In addition, the School of Nursing at The University of Tulsa has indicated their willingness to participate in data collection of this project. Please contact Dr. Susan Gaston at (918) 631-2920 for further information.

Should you wish to deviate from the described, approved protocol, you must notify me and obtain prior approval from the Board for the changes.

If you have any questions concerning your approval, you may contact me at (918) 631-2192 or via e-mail at debbie-newton@utulsa.edu. Additional information concerning the requirements for the protection of human subjects may be found at the Office of Human Research Protection website - http://ohrp.osophs.dhhs.gov/.

Sincerely,

Debbie Newton
Administrative Officer
Institutional Review Board

/dn

cc: Dr. Susan Gaston, TU School of Nursing
Dr. Thomas Buckley, Chair, IRB

APPENDIX E

Cover Letter to Potential Participants

Louise Talley
(918) 594-8078
e-mail: ltalley@lunet.edu

October 1, 2001

Dear Nursing Student:

I am a doctoral student in nursing at Texas Woman's University in Denton, Texas. I would like to ask you to participate in a research study. The study is called: Cross-Cultural Experience, Performance Feedback, Model Competence, and Perceived Cultural Self-Efficacy: Analysis of a Model.

This study is research. It will ask you to think about several things: the cultural knowledge and skills of the nurse you most admire, evaluative feedback you have received in the nursing program, and your own confidence in caring for culturally different clients. If you decide to answer the questions, you will help us to know what influences a nursing student's confidence in caring for culturally different clients.

Your participation in this study is completely voluntary. You may withdraw from the study at any time. There will be no penalty if you refuse to participate. If you choose not to participate, you will not lose any of your entitled benefits. Your grade in this course will not be affected by your decision to participate or refrain from participating in the study. The data will be stored in a locked file cabinet in my home for 5 years and will be destroyed by shredding after that time. Your confidentiality will be protected to the extent that is allowed by law.

If you choose to participate, you will need to complete the attached five (5) questionnaires and return them to me in the envelope provided. It will take you about 20-25 minutes to complete the questionnaires. All responses will be anonymous. Please do not write your name on the questionnaires. When you have completed the questionnaires, please place them in the envelope provided and seal it. Place your sealed envelope in the box at the front of the classroom. Please keep this letter for your own information. Refreshments will be available afterwards as a courtesy thank you for your participation.

You may have questions or wish to discuss your concerns about this research study. If you do have these questions, you can call me at (918) 594-8078 or my advisor, Sally Northam, Ph. D. at (940) 898-2424. You may also request a summary of the results of the research by calling me or e-mailing me at *ltalley@lunet.edu*. You may have questions about your rights as a subject in this study. You may have questions about the way this study was done. If you do have these questions, you may call Ms. Tracy Lindsay in the Office of Research and Grants Administration, Texas Woman's University at (940) 898-3377 or email HSRC@TWU.EDU.

Thank you for you time and interest.

Sincerely,

Louise Talley, RN, MS

APPENDIX F

"Participant Profile" Data Collection Form

The return of your completed questionnaire constitutes your informed consent to act as a participant in this research.

Participant Profile

1. **Which best describes your cultural heritage?**

___ American Indian/Alaska Native
___ Asian
___ Black/African-American
___ Native Hawaiian/Other Pacific Islander
___ White
___ Hispanic
___ Other

2. **What is your age?** ____

3. **Do you hold any degrees at this time? Please indicate by marking those that apply.**

___ None at this time
___ Associate, Major:_____
___ Bachelors, Major:_____
___ Masters, Major:_____
___ Doctorate, Major:_____

4. **What is your current class standing in the nursing program?**
___ Freshman
___ Sophomore
___ Junior
___ Senior

5. **What is your current licensure status?**
___ Unlicensed nursing student
___ Licensed Practical Nurse
___ Registered Nurse

6. **How many years of experience do you have as a licensed nurse?**

___ None
___ Years (Please give number)

CROSS-CULTURAL EXPERIENCE

7. **How many years have you lived outside of the United States?**
___ None
___ < 1 year
___ Year(s) (Please give number)

8. **How many foreign languages can you speak fluently?**

___ None
___ Language(s) (Please give number)

9. **How many foreign languages are there in which you can converse?**

___ None
___ Language(s) (Please give number)

10. **How many foreign languages are there in which you know a minimal amount?**

___ None
___ Language(s) (Please give number)

11. **What percentage of the interactions in your daily life is with persons of racial/ethnic cultures different from your own?** (0-100%)

___ Percent

12. **What is the estimated percentage of patients/clients for whom you have provided care whose racial/ethnic backgrounds were different from your own?** (0-100%)

___ Percent

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CULTURAL DIVERSITY EDUCATION

13. **How many non-nursing courses that had the word "culture", "race" or "minority" in the course name or course description have you completed?**

___ None
___ Non-nursing courses (Please give number)

14. **How many nursing courses that had the word "culture", "race" or "minority" in the course name or course description have you completed?**

___ None
___ Nursing courses (Please give number)

15. **Approximately how many total clock hours would you estimate that you have attended conferences, seminars, or field trips, not associated with a course, that focused on cultural diversity or different racial/ethnic cultures?**

___ None
___ Clock hours (Please give number)

APPENDIX G

"Performance Feedback Scale" Data Collection Form

The return of your completed questionnaire constitutes your informed consent to act as a participant in this research.

How do you rate your NURSING INSTRUCTORS?

Directions:

1. *Positive evaluative feedback can be given to students by nursing instructors in many forms such as exams, written feedback on assignments, individual clinical conferences, or a nod of the head in group discussion.*

2. *Please indicate how much agreement you have with the following statements, in regard to the course(s) you have taken in the nursing program, by marking your answer with a* ☑

I have received positive evaluative feedback from nursing instructors about my *CULTURAL KNOWLEDGE* of:	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1. A client's beliefs about disease and illness	☐	☐	☐	☐	☐
2. Patterns of disease and illness in different racial/ethnic groups	☐	☐	☐	☐	☐
3. Traditional folk health practices	☐	☐	☐	☐	☐
4. Spiritual practices related to health	☐	☐	☐	☐	☐
5. Beliefs toward respect and authority	☐	☐	☐	☐	☐
6. Beliefs toward modesty	☐	☐	☐	☐	☐

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I have received positive evaluative feedback from nursing instructors about my *AWARENESS* OF:	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
7. How cultural biases may influence care of a culturally diverse client	☐	☐	☐	☐	☐
8. Different interpersonal styles used when interacting with a culturally diverse client	☐	☐	☐	☐	☐
9. A client's heritage consistency	☐	☐	☐	☐	☐

I have received positive evaluative feedback from nursing instructors about *ASSESSMENT OF A CLIENT'S*:	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
10. Rituals in the treatment of illness and injury	☐	☐	☐	☐	☐
11. Use of remedies in the treatment of illness and injury	☐	☐	☐	☐	☐
12. Use of traditional healers	☐	☐	☐	☐	☐
13. Spiritual practices related to health	☐	☐	☐	☐	☐

I have received positive evaluative feedback from nursing instructors about my:	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
14. Exploration of my own cultural heritage	☐	☐	☐	☐	☐
15. Sensitivity to a client's cultural values	☐	☐	☐	☐	☐
16. Appropriate communication	☐	☐	☐	☐	☐
17. Culturally specific interventions	☐	☐	☐	☐	☐

APPENDIX H

"Model Evaluation Scale" Data Collection Form

The return of your completed questionnaire constitutes your informed consent to act as a participant in this research.

How do you rate your NURSING ROLE MODEL?

Do you have a nursing role model (a nurse or nursing instructor who is most like the nurse you would like to be)? **YES** ☐ **NO** ☐

If you answered "YES" to the above question, please read the following directions:

1. *Think about the nurse who is most like the nurse you would like to be.*
2. Thinking about that nurse, indicate your amount of agreement with the following statements by marking your answer with a ☑

THE NURSE DEMONSTRATES *CULTURAL KNOWLEDGE* ABOUT:	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
1. A client's beliefs about disease and illness	☐	☐	☐	☐	☐
2. Patterns of disease and illness in different racial/ethnic groups	☐	☐	☐	☐	☐
3. Traditional folk health practices	☐	☐	☐	☐	☐
4. Spiritual practices related to health	☐	☐	☐	☐	☐
5. Beliefs toward respect and authority	☐	☐	☐	☐	☐
6. Beliefs toward modesty	☐	☐	☐	☐	☐

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THE NURSE DEMONSTRATES *AWARENESS* OF:	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
7. How cultural biases may influence care of a culturally diverse client	☐	☐	☐	☐	☐
8. Different interpersonal styles used when interacting with a culturally diverse client	☐	☐	☐	☐	☐
9. A client's heritage consistency	☐	☐	☐	☐	☐

THE NURSE DEMONSTRATES *ASSESSMENT OF A CLIENT'S*:	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
10. Rituals in the treatment of illness and injury	☐	☐	☐	☐	☐
11. Use of remedies in the treatment of illness and injury	☐	☐	☐	☐	☐
12. Use of traditional healers	☐	☐	☐	☐	☐
13. Spiritual practices related to health	☐	☐	☐	☐	☐

THE NURSE *DEMONSTRATES*:	Strongly Disagree	Disagree	Uncertain	Agree	Strongly Agree
14. Exploration of their own cultural heritage	☐	☐	☐	☐	☐
15. Sensitivity to a client's cultural values	☐	☐	☐	☐	☐
16. Appropriate communication	☐	☐	☐	☐	☐
17. Culturally specific interventions	☐	☐	☐	☐	☐

APPENDIX I

"Cultural Self-efficacy Scale" Data Collection Form

The return of your completed questionnaire constitutes your informed consent to act as a participant in this research.

THE CULTURAL SELF-EFFICACY SCALE

Directions: Indicate how much confidence you have about doing each of the behaviors listed below.

1	2	3	4	5
Very little Confidence				Quite a lot of confidence

CONFIDENCE IN MY KNOWLEDGE OF CULTURAL CONCEPTS

	Very little confidence				Quite a lot of confidence
Distinguishing between inter and intra cultural diversity	1	2	3	4	5
Distinguishing between ethnocentrism and discrimination	1	2	3	4	5
Distinguishing between ethnicity and culture	1	2	3	4	5

CONFIDENCE IN MY KNOWLEDGE OF CULTURAL PATTERNS WITHIN DIFFERENT ETHNIC/RACIAL GROUPS

	Blacks/African-Americans	Latino/Hispanics	Native Americans
Family organization	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Role differentiation	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Child care practices	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Utilization of health system	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Types of social supports	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Utilization of traditional folk health practices	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Nutritional patterns	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Economic style of living	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Migration patterns	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Class structure	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Employment patterns	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

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	Blacks/African-Americans	Latino/Hispanics	Native Americans
Patterns of disease/ illness	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Beliefs about health and illness	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Beliefs toward respect and authority	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Beliefs toward modesty	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5
Religious beliefs and patterns	1 2 3 4 5	1 2 3 4 5	1 2 3 4 5

CONFIDENCE IN THE FOLLOWING SPECIFIC NURSING SKILLS

Using an interpreter	1 2 3 4 5
Entering an ethnically distinct community	1 2 3 4 5
Advocacy	1 2 3 4 5
Performing a 24 hour diet review	1 2 3 4 5
Participant observation	1 2 3 4 5
Taking a life history	1 2 3 4 5
Developing a geneogram	1 2 3 4 5

APPENDIX J

"Visual Analogue Cultural Self-efficacy Scale" Data Collection Form

The return of your completed questionnaire constitutes your informed consent to act as a participant in this research.

VISUAL ANALOGUE CULTURAL SELF-EFFICACY SCALE

Please place a vertical mark through each of these horizontal lines to answer the following questions.

EXAMPLE

Suppose you have not had anything to eat for 12 hours. Please mark the line below to indicate how hungry you felt right now.

Not hungry at all — Extremely hungry

You would probably mark a line closer to the extremely hungry end of the scale.

Not hungry at all — Extremely hungry

1. **How much confidence do you have in your knowledge of cultural concepts?**

Little confidence — Quite a lot of confidence

2. **How much confidence do you have in your knowledge of cultural patterns within Black/African-American groups?**

Little confidence — Quite a lot of confidence

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3. **How much confidence do you have in your knowledge of cultural patterns within Latino/Hispanic groups?**

Little confidence — Quite a lot of confidence

4. **How much confidence do you have in your knowledge of cultural patterns within Native American groups?**

Little confidence — Quite a lot of confidence

How much confidence do you have in the following specific nursing skills?

5. **Using an interpreter**

Little confidence — Quite a lot of confidence

6. **Entering an ethnically distinct community**

Little confidence — Quite a lot of confidence

7. **Client advocacy**

Little confidence — Quite a lot of confidence

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8. **Performing a 24 hour diet review**

Little confidence — Quite a lot of confidence

9. **Participant observation**

Little confidence — Quite a lot of confidence

10. **Taking a life history**

Little confidence — Quite a lot of confidence

11. **Developing a geneogram**

Little confidence — Quite a lot of confidence

Thank you for your participation.